



# OcNOS®

## Open Compute Network Operating System for Data Centers Version 6.5.4

NetConf Command Reference

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# Preface

This guide describes how to configure OcNOS.

## Audience

This guide is intended for network administrators and other engineering professionals who configure OcNOS.

## Conventions

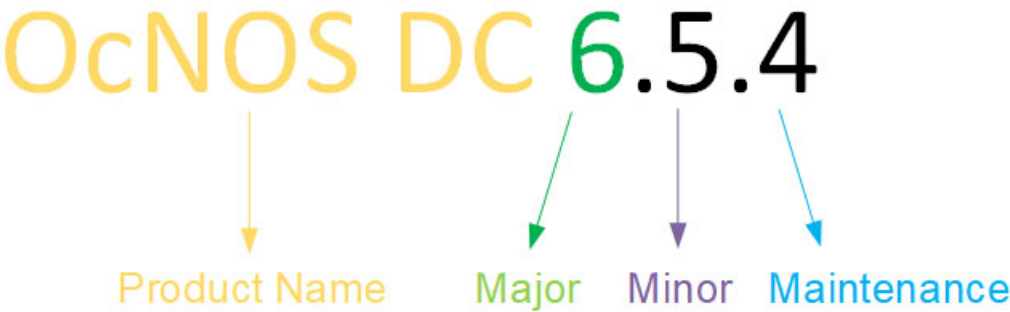
Table 1 on page 65 shows the conventions used in this guide.

Table 1: Conventions

Convention	Description
Italics	Emphasized terms; titles of books
Note:	Special instructions, suggestions, or warnings
<code>monospaced type</code>	Code elements such as commands, parameters, files, and directories

## IP Infusion Product Release Version

An integer indicates Major, Minor, and Maintenance release versions. Build numbers are for internal tracking and verification of the software build process and are visible to customers as part of the software version number.



- Product Name:** IP Infusion Product Family
- Major Version:** New customer-facing functionality that represents a significant change to the code base; in other words, a significant marketing change or direction in the product.
- Minor Version:** Enhancements/extensions to existing features, external needs, or internal requirements might be motivated by improvements to satisfy new sales regions or marketing initiatives.

**Maintenance Version:** It is a collection of product bugs/hotfixes and is usually scheduled every 30 or 60 days, based on the number of hotfixes.

---

## Related Documentation

For information about installing OcNOS, see the *Installation Guide* for your platform.

---

## Feature Availability

The features described in this document that are available depend upon the OcNOS SKU that you purchased. See the *Feature Matrix* for a description of the OcNOS SKUs.

---

## Migration Guide

Check the *Migration Guide* for configuration changes to make when migrating from one version of OcNOS to another.

---

## IP Maestro Support

Monitor devices running OcNOS Release 6.3.4-70 and above using IP Maestro software.

---

## Technical Support

IP Infusion maintains an online technical support site that provides a variety of technical support programs for licensed OcNOS customers at the [Technical Assistance Center](#).

Customers and partners enjoy full access to the support website. The site allows customers and partners to open technical support calls, update open calls with new information, and review the status of open or closed calls. The password-protected site includes technical documentation, Release Notes, and descriptions of service offerings.

---

## Technical Documentation

For core commands and configuration procedures, visit: [Product Documentation](#).

For training videos, visit: [OcNOS Free Training Videos](#).

For a list of supported platforms and SKUs of OcNOS features, refer to the [OcNOS Feature Matrix](#).

---

## Technical Sales

Contact the IP Infusion sales representative for more information about the OcNOS solution.

---

## Documentation Disclaimer

The global documentation site is evolving to provide an enhanced website user experience for select topics included in this release. Some guides are now available outside the existing documentation library and can be accessed directly from custom documentation landing pages. These guides offer robust in-built search functionality.

For the latest documentation, visit the product-specific documentation landing page and select the relevant guide.

---

## Comments

If you have comments, or need to report a problem with the content, contact [techpubs@ipinfusion.com](mailto:techpubs@ipinfusion.com).



---

## CHAPTER 1 NetConf Command Reference

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---

### IPI-MANAGEMENT-SERVER

---

#### Configure feature enabled

Enable callhome feature on the NETCONF server

This command is supported when following feature are enabled NETCONF feature

Attribute Name: feature-enabled

Attribute Type: empty

#### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <callhome>
    <config>
      </feature-enabled>
    </config>
  </callhome>
</netconf-server>
```

#### Command Syntax

```
feature netconf callhome enable
```

---

#### Configure management port

Interface to be used to connect the callhome server

This command is supported when following feature are enabled NETCONF feature

Attribute Name: management-port

Attribute Type: string

Default Value: eth0

Attribute Range: 1-49

#### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <callhome>
    <config>
      <management-port>IFNAME</management-port> <!-- operation="delete"-->
    </config>
  </callhome>
</netconf-server>
```

#### Command Syntax

```
management-port IFNAME
```

---

## Configure port

Callhome server listening port number

This command is supported when following feature are enabled NETCONF feature

Attribute Name: port

Attribute Type: inet:port-number

Default Value: 4334

Attribute Range: 1-65535

Attribute Name: address

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <callhome>
    <netconf-clients>
      <netconf-client>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          <address>A.B.C.D|X:X::X:X|HOSTNAME</address>
        </config>
        <port>1</port>
      </netconf-client>
    </netconf-clients>
  </callhome>
</netconf-server>
```

### Command Syntax

```
callhome server WORD (A.B.C.D|X:X::X:X|HOSTNAME) (port <1-65535>|)
```

---

## Configure enable

specifies whether server will reconnect after client closes the session

This command is supported when following feature are enabled NETCONF feature

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <callhome>
    <reconnect>
      <config>
        </enable>
      </config>
    </reconnect>
  </callhome>
</netconf-server>
```

```
</reconnect>
</callhome>
</netconf-server>
```

## Command Syntax

```
reconnect enable
```

---

## Configure retry max attempts

Specifies the number of retry attempts the server should attempt to the callhome server before giving up. Set 0 to retry infinitely.

This command is supported when following feature are enabled NETCONF feature

Attribute Name: retry-max-attempts

Attribute Type: uint8

Default Value: 3

Attribute Range: 0-255

### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <callhome>
    <reconnect>
      <config>
        <retry-max-attempts>0</retry-max-attempts> <!-- operation="delete"-->
      </config>
    </reconnect>
  </callhome>
</netconf-server>
```

## Command Syntax

```
retry-max-attempts <0-255>
```

---

## Configure retry interval

Specifies the number of seconds to wait after a connect attempt to the callhome server has failed

This command is supported when following feature are enabled NETCONF feature

Attribute Name: retry-interval

Attribute Type: uint32

Default Value: 300

Attribute Range: 1-86400

### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <callhome>
    <reconnect>
      <config>
        <retry-interval>1</retry-interval> <!-- operation="delete"-->
      </config>
    </reconnect>
  </callhome>
</netconf-server>
```

```

</config>
</reconnect>
</callhome>
</netconf-server>

```

## Command Syntax

```
retry-interval <1-86400>
```

---

## Configure translation mode

Enable/disable NETCONF translation

This command is supported when following feature are enabled NETCONF translation feature,NETCONF feature

Attribute Name: translation-mode

Attribute Type: enum (openconfig)

### Netconf edit-config payload

```

<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <netconf-translation>
    <config>
      <translation-mode>openconfig</translation-mode> <!-- operation="delete"-->
    </config>
  </netconf-translation>
</netconf-server>

```

## Command Syntax

```
netconf translation (openconfig)
```

---

## Configure feature netconf ssh

Use this attribute to enable or disable NETCONF SSH feature.

Attribute Name: feature-netconf-ssh

Attribute Type: boolean

### Netconf edit-config payload

```

<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <netconf-ssh-config>
    <config>
      <feature-netconf-ssh>true</feature-netconf-ssh> <!-- operation="delete"-->
    </config>
  </netconf-ssh-config>
</netconf-server>

```



```
</vrfs>
</netconf-server>
```

## Command Syntax

```
feature netconf-ssh (vrf (management|NAME) |)
```

---

## Configure vrf name

Use this attribute to enable or disable NETCONF SSH feature.

Attribute Name: feature-netconf-ssh

Attribute Type: boolean

## Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
<vrfs>
<vrf>
  <vrf-name>management</vrf-name>
  <config>
    <vrf-name>management</vrf-name>
  </config>
</vrf>
</vrfs>
<netconf-ssh-config>
<config>
  <feature-netconf-ssh>true</feature-netconf-ssh> <!-- operation="delete"-->
</config>
</netconf-ssh-config>
</vrf>
</vrfs>
</netconf-server>
```

## Command Syntax

```
no feature netconf-ssh (vrf (management|NAME) |)
```

---

## Configure feature netconf tls

Use this attribute to enable or disable NETCONF TLS feature.

Attribute Name: feature-netconf-tls

Attribute Type: boolean

## Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
<vrfs>
<vrf>
  <vrf-name>management</vrf-name>
  <config>
    <vrf-name>management</vrf-name>
  </config>
</vrf>
</vrfs>
<netconf-tls-config>
<config>
```

```

        <feature-netconf-tls>true</feature-netconf-tls> <!-- operation="delete"-->
    </config>
</netconf-tls-config>
</vrf>
</vrfs>
</netconf-server>

```

## Command Syntax

```
feature netconf-tls (vrf (management|NAME) |)
```

---

## Configure ssh port

Use this attribute to set the ssh-port number on which the NETCONF server listens for connections. The default port on which the netconf-ssh server listens is 830.

This command is supported when following feature are enabled Virtual routing and forwarding, NETCONF feature

Attribute Name: ssh-port

Attribute Type: uint32

Attribute Range: 1024-65535

## Netconf edit-config payload

```

<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <netconf-ssh-config>
    <config>
      <ssh-port>1024</ssh-port> <!-- operation="delete"-->
    </config>
  </netconf-ssh-config>
</netconf-server>

```

## Command Syntax

```
netconf server ssh-port <1024-65535> (vrf (management|NAME) |)
```

---

## Configure tls port

Use this attribute to set the tls-port number on which the NETCONF server listens for connections. The default port on which the netconf-tls server listens is 6513.

This command is supported when following feature are enabled Virtual routing and forwarding, NETCONF feature

Attribute Name: tls-port

Attribute Type: uint32

Attribute Range: 1024-65535

**Netconf edit-config payload**

```

<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <netconf-tls-config>
    <config>
      <tls-port>1024</tls-port> <!-- operation="delete"-->
    </config>
  </netconf-tls-config>
</netconf-server>

```

**Command Syntax**

```
netconf server tls-port <1024-65535> (vrf (management|NAME) |)
```

---

**Configure max cache notifications**

Specifies the maximum number of notifications those can be stored in cache. Set 0 for infinite notifications.

This command is supported when following feature are enabled NETCONF feature

Attribute Name: max-cache-notifications

Attribute Type: uint16

Default Value: 100

Attribute Range: 0-10000

**Netconf edit-config payload**

```

<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <notification-cache>
    <config>
      <max-cache-notifications>0</max-cache-notifications> <!-- operation="delete"-->
    </config>
  </notification-cache>
</netconf-server>

```

**Command Syntax**

```
max-cache-notifications <0-10000>
```

---

**Configure cache period**

Specifies the number of seconds, cmdl store notification messages in cache since it started

This command is supported when following feature are enabled NETCONF feature

Attribute Name: cache-period

Attribute Type: uint32

Default Value: 1200

Attribute Range: 1-3600

### Netconf edit-config payload

```
<netconf-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-server">
  <notification-cache>
    <config>
      <cache-period>1</cache-period> <!-- operation="delete"-->
    </config>
  </notification-cache>
</netconf-server>
```

### Command Syntax

```
cache-period <1-3600>
```

---

## IPI-STREAMING-TELEMETRY

---

### Configure feature enabled

Use this attribute to enable or disable Telemetry feature

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: feature-enabled

Attribute Type: empty

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <streaming-telemetry>
    <config>
      </feature-enabled><!-- operation="delete"-->
    </config>
  </streaming-telemetry>
</telemetry-system>
```

### Command Syntax

```
feature streaming-telemetry (vrf (management|NAME) |)
```

---

## Configure retry interval

If the grpc-tunnel-server is unreachable, the gnmi-server retries to connect with gnmi-client after the retry-interval

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: retry-interval

Attribute Type: uint32

Default Value: 60

Attribute Range: 30-3000

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <streaming-telemetry>
      <config>
        <retry-interval>30</retry-interval> <!-- operation="delete"-->
      </config>
    </streaming-telemetry>
  </vrf>
</vrfs>
</telemetry-system>
```

### Command Syntax

```
grpc-tunnel-server retry-interval <30-3000> (vrf (management|NAME) |)
```

---

## Configure gnmi severity

device's debug telemetry severity level

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: gnmi-severity

Attribute Type: enum (debug|info|warning|error|fatal|panic|d-panic)

Default Value: error

Attribute Name: gnmi-debug

Attribute Type: empty

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
```

```

    <config>
      <vrf-name>management</vrf-name>
    </config>
  <streaming-telemetry>
    <debug>
    <config>
      </gnmi-debug><!-- operation="delete"-->
      <gnmi-severity>error</gnmi-severity> <!-- operation="delete"-->
    </config>
  </debug>
</streaming-telemetry>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```

debug telemetry gnmi enable severity (debug|info|warning|error|fatal|panic|d-panic)
(vrf (management|NAME) |)

```

---

## Configure gnmi debug

Enable or Disable device's debug telemetry

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: gnmi-debug

Attribute Type: empty

## Netconf edit-config payload

```

<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
  <vrf>
    <vrf-name>management</vrf-name>
    <config>
      <vrf-name>management</vrf-name>
    </config>
  <streaming-telemetry>
  <debug>
  <config>
    </gnmi-debug><!-- operation="delete"-->
  </config>
</debug>
</streaming-telemetry>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```

debug telemetry gnmi enable (vrf (management|NAME) |)

```

---

## Configure name

Reference to the identifier of the subscription itself. The id will be the handle to refer to the subscription once created

Attribute Name: name

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <subscriptions>
    <persistent-subscriptions>
      <persistent-subscription> <!-- operation="delete"-->
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      </persistent-subscription>
    </persistent-subscriptions>
  </subscriptions>
</telemetry-system>
```

### Command Syntax

```
subscription-name NAME (vrf (management|NAME) |)
```

---

## Configure encoding

Selection of the specific encoding or RPC framework for telemetry messages to and from the network element. The encoding method controls specifically the wire format of the telemetry data, and also controls which RPC framework may be in use to exchange telemetry data

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: encoding

Attribute Type: enum (json-ietf|json|proto)

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
```

```

    <config>
      <vrf-name>management</vrf-name>
    </config>
  <subscriptions>
    <persistent-subscriptions>
      <persistent-subscription>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
        <encoding>json-ietf</encoding> <!-- operation="delete"-->
      </persistent-subscription>
    </persistent-subscriptions>
  </subscriptions>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```
encoding (json-ietf|json|proto)
```

---

## Configure sensor group

Reference to the telemetry sensor group name

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: sensor-group

Attribute Type: string

Attribute Range: 1-64

Attribute Name: sample-interval

Attribute Type: uint64

Attribute Range: 10-3600

## Netconf edit-config payload

```

<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <subscriptions>
    <persistent-subscriptions>
      <persistent-subscription>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      </persistent-subscription>
    </persistent-subscriptions>
  </subscriptions>
</telemetry-system>

```



```

</config>
<sensor-profiles>
<sensor-profile> <!-- operation="delete"-->
  <sensor-group>SENSOR-GROUP-NAME</sensor-group>
  <config>
    <sensor-group>WORD</sensor-group>
    <sample-interval>10</sample-interval>
  </config>
</sensor-profile>
</sensor-profiles>
</persistent-subscription>
</persistent-subscriptions>
</subscriptions>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```
sensor-group SENSOR-GROUP-NAME sample-interval <10-3600>
```

---

## Configure group id

The destination group id references a configured group of destinations for the telemetry stream

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: group-id

Attribute Type: string

Attribute Range: 1-64

## Netconf edit-config payload

```

<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <subscriptions>
    <persistent-subscriptions>
      <persistent-subscription>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
        <destination-groups>
          <destination-group> <!-- operation="delete"-->
            <group-id>GRPC-GROUP-NAME</group-id>
            <config>
              <group-id>WORD</group-id>
            </config>
          </destination-group>
        </destination-groups>
      </persistent-subscription>
    </persistent-subscriptions>
  </subscriptions>
</telemetry-system>

```

```

    </config>
  </destination-group>
</destination-groups>
</persistent-subscription>
</persistent-subscriptions>
</subscriptions>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```
destination-group GRPC-GROUP-NAME
```

---

## Configure sensor group id

Name or identifier for the sensor group itself. Will be referenced by other configuration specifying a sensor group

Attribute Name: sensor-group-id

Attribute Type: string

Attribute Range: 1-64

## Netconf edit-config payload

```

<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <sensor-groups>
    <sensor-group> <!-- operation="delete"-->
      <sensor-group-id>SENSOR-NAME</sensor-group-id>
      <config>
        <sensor-group-id>WORD</sensor-group-id>
      </config>
    </sensor-group>
  </sensor-groups>
</telemetry-system>

```

## Command Syntax

```
sensor-group SENSOR-NAME (vrf (management|NAME) |)
```

---

## Configure path

Reference to the path of interest

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: path

Attribute Type: string

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <sensor-groups>
    <sensor-group>
      <sensor-group-id>SENSOR-NAME</sensor-group-id>
      <config>
        <sensor-group-id>WORD</sensor-group-id>
      </config>
      <sensor-paths>
        <sensor-path> <!-- operation="delete"-->
          <path>SENSOR-PATH</path>
          <config>
            <path>WORD</path>
          </config>
        </sensor-path>
      </sensor-paths>
    </sensor-group>
  </sensor-groups>
</telemetry-system>
```

### Command Syntax

```
sensor-path SENSOR-PATH
```

---

## Configure vrf name

Unique identifier for the destination group

Attribute Name: group-id

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```
<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
```

```

        <vrf-name>management</vrf-name>
    </config>
<destination-groups>
<destination-group> <!-- operation="delete"-->
    <group-id>TUNNEL-NAME</group-id>
    <config>
        <group-id>WORD</group-id>
    </config>
</destination-group>
</destination-groups>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```
destination-group TUNNEL-NAME (vrf (management|NAME) |)
```

---

## Configure destination port

Reference to the port number of the stream destination

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: destination-port

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```

<telemetry-system xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-streaming-
telemetry">
    <vrfs>
    <vrf>
        <vrf-name>management</vrf-name>
        <config>
            <vrf-name>management</vrf-name>
        </config>
    </vrf>
    </vrfs>
    <destination-groups>
    <destination-group>
        <group-id>TUNNEL-NAME</group-id>
        <config>
            <group-id>WORD</group-id>
        </config>
    </destination-group>
    </destination-groups>
    <destinations>
    <destination> <!-- operation="delete"-->
        <destination-port>1</destination-port>
        <config>
            <destination-port>1</destination-port>
            <destination-address>A.B.C.D</destination-address>
        </config>
        <destination-address>A.B.C.D</destination-address>
    </destination>
    </destinations>
</telemetry-system>

```

```

</destinations>
</destination-group>
</destination-groups>
</vrf>
</vrfs>
</telemetry-system>

```

## Command Syntax

```
tunnel-server ip A.B.C.D port <1-65535>
```

---

# IPI-MANAGEMENT-SERVER-NOTIFICATION

---

## Configure severity

If notification enabled, all the notifications having severity higher than or equal to this severity allowed. If notification disabled, all the notifications having severity lower than or equal to this severity not allowed

Attribute Name: severity

Attribute Type: enum (all|info|warning|minor|major|critical)

Default Value: all

Attribute Name: enable

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```

<management-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-management-
server">
  <module-notifications>
    <module-notification>
      <module-name>auth</module-name>
      <config>
        <module-name>auth</module-name>
        <enable>enable</enable>
      </config>
      <severity>all</severity>
    </module-notification>
  </module-notifications>
</management-server>

```

## Command Syntax

```

module
  (auth|bgp|cmm|hostp|hsl|isis|lag|l2mrib|mstp|mrrib|nsm|onm|oam|ospf|ospf6|rip|pim
  |rib|vrrp|sflow|pserv|cml|ndd|ripng|vlog|all|udld) notification (disable|enable)
  (severity (all|info|warning|minor|major|critical))

```

## IPI-VRF

### Configure instance name

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>vrf</instance-type>
    <config>
      <instance-type>vrf</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  </network-instance>
</network-instances>
```

### Command Syntax

```
ip vrf WORD
```

### Configure instance type

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: vrf-name

Attribute Type: string

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>mac-vrf</instance-type>
    <config>
      <instance-type>mac-vrf</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  </network-instance>
</network-instances>

```

**Command Syntax**

```
mac vrf WORD
```

---

**Configure description**

VRF-specific description

Attribute Name: description

Attribute Type: string

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <config>
        <description>LINE</description> <!-- operation="delete"-->
      </config>
    </vrf>
  </network-instance>
</network-instances>

```

**Command Syntax**

```
description LINE
```

---

## Configure router id

VRF Router ID

Attribute Name: router-id

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <config>
        <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
      </config>
    </vrf>
  </network-instance>
</network-instances>
```

### Command Syntax

```
router-id A.B.C.D
```

---

## Configure evpn layer3 network id

L3 EVPN Identifier

Attribute Name: evpn-layer3-network-id

Attribute Type: uint32

Attribute Range: 1-16777215

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <config>
        <evpn-layer3-network-id>1</evpn-layer3-network-id> <!--
operation="delete"-->
```



```

    </config>
  </vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
l3vni <1-16777215>
```

---

## Configure mtu

This attribute is used to configure the MTU on VRF

Attribute Name: mtu

Attribute Type: uint32

Attribute Range: 64-65535

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <config>
        <mtu>64</mtu> <!-- operation="delete"-->
      </config>
    </vrf>
  </network-instance>
</network-instances>

```

## Command Syntax

```
mtu <64-65535>
```

---

## Configure snmp context name

Use this attribute to set the SNMP context for VRF.

This command is supported when following feature are enabled SNMP feature

Attribute Name: snmp-context-name

Attribute Type: string

Attribute Range: 1-32

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">

```

```
<network-instance>
  <instance-name>WORD</instance-name>
  <config>
    <instance-name>WORD</instance-name>
    <instance-type>vrf</instance-type>
  </config>
  <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <snmp>
      <config>
        <snmp-context-name>WORD</snmp-context-name> <!-- operation="delete"-->
      </config>
    </snmp>
  </vrf>
</network-instance>
</network-instances>
```

### Command Syntax

```
snmp context-name WORD
```

---

## clear router-id

### Netconf RPC payload

```
<clear-default-router-id xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf"/>
```

### Command Syntax

```
clear router-id
```

---

## clear router-id vrf (VRFNAME|)

Attribute Name: vrfName

Attribute Type: string

### Netconf RPC payload

```
<clear-vrf-router-id xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
  <vrfName>VRFNAME</vrfName>
</clear-vrf-router-id>
```

### Command Syntax

```
clear router-id vrf (VRFNAME|)
```

---

## IPI-INTERFACE

---

### Configure name

The textual name of the interface. The value of this object should be the name of the interface as assigned by the local device and should be suitable for use in commands entered at the device's 'console'. This might be a text name, such as 'le0' or a simple port number, such as '1', depending on the interface naming syntax of the device. If several entries in the ifTable together represent a single interface as named by the device, then each will have the same value of name. Note that for an agent which responds to SNMP queries concerning an interface on some other (proxied) device, then the value of name for such an interface is the proxied device's local name for it. If there is no local name, or this object is otherwise not applicable, then this object contains a zero-length string.

Attribute Name: name

Attribute Type: string

Attribute Range: 1-49

Attribute Name: enable-switchport

Attribute Type: uint8

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface> <!-- operation="delete"-->
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
      </enable-switchport>
    </config>
  </interface>
</interfaces>
```

### Command Syntax

```
interface IFNAME (switchport|)
```

---

### Configure enable switchport

This attribute is used to set the mode of the Hybrid Switch Router feature to switched only. All interfaces are configured routed by default

Attribute Name: enable-switchport

Attribute Type: empty

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
  </interface>
</interfaces>
```

```

    </enable-switchport><!-- operation="delete"-->
</interface>
</interfaces>

```

## Command Syntax

```
switchport
```

---

## Configure vrf name

This attribute is used to associates an interface with a VRF

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <vrf-name>WORD</vrf-name> <!-- operation="delete"-->
</interface>
</interfaces>

```

## Command Syntax

```
ip vrf forwarding WORD
```

---

## Configure vr name

This attribute is used to associates an interface with a VR

Attribute Name: vr-name

Attribute Type: string

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <vr-name>WORD</vr-name> <!-- operation="delete"-->
</interface>
</interfaces>

```

## Command Syntax

```
virtual-router forwarding WORD
```

---

## Configure mtu

This attribute is used to set mtu value to interface. The size of the largest packet which can be sent/received on the interface, specified in octets. For interfaces that are used for transmitting network datagrams, this is the size of the largest network datagram that can be sent on the interface.

Attribute Name: mtu

Attribute Type: uint32

Attribute Range: 64-65535

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <mtu>64</mtu> <!-- operation="delete"-->
  </interface>
</interfaces>
```

### Command Syntax

```
mtu <64-65535>
```

---

## Configure allow first frame

This Object is used to allow or drop first frame on L2 movement actions

Attribute Name: allow-first-frame

Attribute Type: empty

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    </allow-first-frame><!-- operation="delete"-->
  </interface>
</interfaces>
```

### Command Syntax

```
l2 move-allow-first-frame
```

---

## Configure dot1ad ether type

This attribute is used to configure the ethertype value for the interface in the format 0xhhhh. Currently supported values are 0x8100 (default) or 0x88a8 or 0x9100 or 0x9200.

Attribute Name: dot1ad-ether-type

Attribute Type: string

Attribute Range: 6-6

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <dot1ad-ether-type>ETHERTYPE</dot1ad-ether-type> <!-- operation="delete"-->
  </interface>
</interfaces>
```

### Command Syntax

```
dot1ad ethertype ETHERTYPE
```

---

## Configure description

Use this attribute to set description for the interface

Attribute Name: description

Attribute Type: string

Attribute Range: 1-128

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <description>1</description> <!-- operation="delete"-->
  </interface>
</interfaces>
```

### Command Syntax

```
description LINE
```

---

## Configure shutdown

Use this attribute to enable the selected interface. This leaf contains the configured, desired state of the interface. The testing(3) state indicates that no operational packets can be passed. When a managed system initializes, all interfaces start with ifAdminStatus in the down(2) state. As a result of either explicit management action or per configuration information retained by the managed system, ifAdminStatus is then changed to either the up(1) or testing(3) states (or remains in the down(2) state).

Attribute Name: shutdown

Attribute Type: empty

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    </shutdown><!-- operation="delete"-->
  </interface>
</interfaces>
```

### Command Syntax

shutdown

---

## Configure if loopback

This attribute is used to enable port loopback

Attribute Name: if-loopback

Attribute Type: enum (tx|rx)

Attribute Name: if-loopback-level

Attribute Type: enum (mac|phy)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
  <interface-loopback>
    <config>
      <if-loopback-level>mac</if-loopback-level>
      <if-loopback>tx</if-loopback>
    </config>
  </interface-loopback>
</interface>
</interfaces>
```

### Command Syntax

loopback (tx|rx) (mac|phy)

---

## clear interface (IFNAME|) counters

Attribute Name: name

Attribute Type: string

## Netconf RPC payload

```
<clear-interface-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
interface">  
  <name>IFNAME</name>  
</clear-interface-counters>
```

## Command Syntax

```
clear interface (IFNAME|) counters
```

---

# IPI-IF-ETHERNET

---

## Configure duplex mode

Use this attribute to set the duplex mode for the interface. Auto-negotiation if enabled, is turned off when duplex mode is set for the interface. When auto-negotiation is enabled, the interface should negotiate the duplex mode directly (typically full-duplex).

Attribute Name: duplex-mode

Attribute Type: enum (half|full)

## Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">  
<interface>  
  <name>IFNAME</name>  
  <config>  
    <name>IFNAME</name>  
  </config>  
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">  
    <config>  
      <duplex-mode>half</duplex-mode> <!-- operation="delete"-->  
    </config>  
  </ethernet>  
</interface>  
</interfaces>
```

## Command Syntax

```
duplex (half|full)
```

---

## Configure mac address

Use this attribute to set the mac address for an interface. If not specified, the corresponding operational state leaf is expected to show the system-assigned MAC address.

Attribute Name: mac-address

Attribute Type: string

Attribute Range: 1-20



**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
    <config>
      <mac-address>MAC</mac-address> <!-- operation="delete"-->
    </config>
  </ethernet>
</interface>
</interfaces>
```

**Command Syntax**

```
mac-address (MAC|use-physical)
```

---

**Configure secondary mac address**

Use this attribute to set the secondary mac address for an interface to terminate L3 packets.

Attribute Name: secondary-mac-address

Attribute Type: empty

**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
    <config>
      </secondary-mac-address><!-- operation="delete"-->
    </config>
  </ethernet>
</interface>
</interfaces>
```

**Command Syntax**

```
mac-address secondary peer-mlag
```

---

**Configure port speed**

This attribute is used to set the link speed for the interface. To enable auto-negotiation for the interface, set this attribute to value auto. When auto-negotiation is enabled, it is expected that the interface will select the highest speed available based on negotiation. When auto-negotiation is not enabled, sets the link speed to a fixed value -- supported values are defined by IF\_INTERFACE\_SPEED\_T enum. When limited auto-negotiation is required, select the speed

after the auto option. With this only the specified speed will be advertised and interface will negotiate with peer with that speed only.

Attribute Name: port-speed

Attribute Type: enum (10m|100m|1g|2.5g|10g|20g|25g|40g|50g|100g|200g|400g|auto|auto 10m|auto 100m|auto 1g)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
      <config>
        <port-speed>10m</port-speed> <!-- operation="delete"-->
      </config>
    </ethernet>
  </interface>
</interfaces>
```

### Command Syntax

```
speed (10m|100m|1g|2.5g|10g|20g|25g|40g|50g|100g|200g|400g|auto|auto 10m|auto
100m|auto 1g)
```

---

## Configure enable rcv

The textual name of the interface. The value of this object should be the name of the interface as assigned by the local device and should be suitable for use in commands entered at the device's 'console'. This might be a text name, such as 'le0' or a simple port number, such as '1', depending on the interface naming syntax of the device. If several entries in the ifTable together represent a single interface as named by the device, then each will have the same value of name. Note that for an agent which responds to SNMP queries concerning an interface on some other (proxied) device, then the value of name for such an interface is the proxied device's local name for it. If there is no local name, or this object is otherwise not applicable, then this object contains a zero-length string.

Attribute Name: name

Attribute Type: string

Attribute Name: enable-rcv

Attribute Type: enum (off|on)

Attribute Name: enable-snd

Attribute Type: enum (off|on)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
  </interface>
</interfaces>
```

```

<ethernet>
<flow-control>
<config>
  <enable-rcv>off</enable-rcv>
  <enable-snd>off</enable-snd>
</config>
</flow-control>
</ethernet>
</interface>
</interfaces>

```

## Command Syntax

```
flowcontrol both
```

---

## Configure enable rcv

This attribute is used to show flow control on receive

This command is supported when following feature are enabled L2 feature

Attribute Name: enable-rcv

Attribute Type: enum (off|on)

Default Value: off

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
  <flow-control>
  <config>
    <enable-rcv>off</enable-rcv> <!-- operation="delete"-->
  </config>
</flow-control>
</ethernet>
</interface>
</interfaces>

```

## Command Syntax

```
flowcontrol receive (off|on)
```

---

## Configure enable snd

This attribute is used to show flow control on send

This command is supported when following feature are enabled L2 feature

Attribute Name: enable-snd

Attribute Type: enum (off|on)

Default Value: off

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
      <flow-control>
        <config>
          <enable-snd>off</enable-snd> <!-- operation="delete"-->
        </config>
      </flow-control>
    </ethernet>
  </interface>
</interfaces>
```

### Command Syntax

```
flowcontrol send (off|on)
```

## IPI-IF-IP

### Configure primary ip addr

Use this attribute to specify that an IP address and prefix length will be used by this interface. If the secondary parameter is not specified, this attribute overwrites the primary IP address. If the secondary parameter is specified, this attribute adds a new IP address to the interface. The secondary address cannot be configured in the absence of a primary IP address. The primary address cannot be removed when a secondary address is present.

Attribute Name: primary-ip-addr

Attribute Type: string

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <config>
        <primary-ip-addr>A.B.C.D/M|A.B.C.D A.B.C.D</primary-ip-addr> <!--
operation="delete"-->
      </config>
    </ipv4>
```

```
</interface>
</interfaces>
```

## Command Syntax

```
ip address (A.B.C.D/M|A.B.C.D A.B.C.D)
```

---

## Configure enable dhcp ip address

Use this attribute to specify that a DHCP client will be used to obtain an IP address for an interface.

Attribute Name: enable-dhcp-ip-address

Attribute Type: empty

## Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <config>
      </enable-dhcp-ip-address><!-- operation="delete"-->
    </config>
  </ipv4>
</interface>
</interfaces>
```

## Command Syntax

```
ip address dhcp
```

---

## Configure ip addr label

Label of this address.

Attribute Name: ip-addr-label

Attribute Type: string

Default Value: NULL

Attribute Name: primary-ip-addr

Attribute Type: string

## Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
```

```

    <config>
      <primary-ip-addr>A.B.C.D/M|A.B.C.D A.B.C.D</primary-ip-addr> <!--
operation="delete"-->
      <ip-addr-label>LINE</ip-addr-label> <!-- operation="delete"-->
    </config>
  </ipv4>
</interface>
</interfaces>

```

### Command Syntax

```
ip address (A.B.C.D/M|A.B.C.D A.B.C.D) label LINE
```

---

## Configure ipv4 unnumbered if name

This attribute is used to Enable IP processing without an explicit address

Attribute Name: ipv4-unnumbered-if-name

Attribute Type: string

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <config>
        <ipv4-unnumbered-if-name>IFNAME</ipv4-unnumbered-if-name> <!--
operation="delete"-->
      </config>
    </ipv4>
  </interface>
</interfaces>

```

### Command Syntax

```
ip unnumbered IFNAME
```

---

## Configure remote address

This attribute is used to set the remote address of the PPP link

Attribute Name: remote-address

Attribute Type: string

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>

```

```

    <name>IFNAME</name>
  </config>
  <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <config>
      <remote-address>A.B.C.D/M</remote-address> <!-- operation="delete"-->
    </config>
  </ipv4>
</interface>
</interfaces>

```

### Command Syntax

```
ip remote-address A.B.C.D/M
```

---

## Configure primary anycast

Use this attribute to set the anycast flag for the IPv4 primary address of an interface.

Attribute Name: primary-anycast

Attribute Type: empty

Attribute Name: primary-ip-addr

Attribute Type: string

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <config>
        <primary-ip-addr>A.B.C.D/M|A.B.C.D A.B.C.D</primary-ip-addr> <!--
operation="delete"-->
        </primary-anycast><!-- operation="delete"-->
      </config>
    </ipv4>
  </interface>
</interfaces>

```

### Command Syntax

```
ip address (A.B.C.D/M|A.B.C.D A.B.C.D) anycast
```

---

## Configure ip address

Use this attribute to specify a secondary IP address that will be used by this interface. The secondary address cannot be configured in the absence of a primary IP address. The primary address cannot be removed when a secondary address is present.

Attribute Name: ip-address

Attribute Type: string

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <secondary-addresses> <!-- operation="delete"-->
      <ip-address>A.B.C.D/M|A.B.C.D A.B.C.D</ip-address>
      <config>
        <ip-address>A.B.C.D/M|A.B.C.D A.B.C.D</ip-address>
      </config>
    </secondary-addresses>
  </ipv4>
</interface>
</interfaces>

```

**Command Syntax**

```
ip address (A.B.C.D/M|A.B.C.D A.B.C.D) secondary
```

**Configure ip label**

Use this attribute to specify a descriptive label for this IPv4 address.

Attribute Name: ip-label

Attribute Type: string

Default Value: NULL

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <secondary-addresses>
      <ip-address>A.B.C.D/M|A.B.C.D A.B.C.D</ip-address>
      <config>
        <ip-address>A.B.C.D/M</ip-address>
        <ip-label>LINE</ip-label> <!-- operation="delete"-->
      </config>
    </secondary-addresses>
  </ipv4>
</interface>
</interfaces>

```



## Command Syntax

```
ip address (A.B.C.D/M|A.B.C.D A.B.C.D) secondary label LINE
```

---

## Configure secondary anycast

Use this attribute to set the anycast flag for the IPv4 secondary address of an interface.

Attribute Name: secondary-anycast

Attribute Type: empty

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv4 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <secondary-addresses>
        <ip-address>A.B.C.D/M|A.B.C.D A.B.C.D</ip-address>
        <config>
          <ip-address>A.B.C.D/M</ip-address>
        </config>
        </secondary-anycast><!-- operation="delete"-->
      </secondary-addresses>
    </ipv4>
  </interface>
</interfaces>
```

## Command Syntax

```
ip address (A.B.C.D/M|A.B.C.D A.B.C.D) secondary anycast
```

---

## Configure enable auto config

Use this attribute to enable autoconfiguration of IPv6 address in host interface. IPv6 address are formed using the Prefix learned from RA and suffix formed using EUI-64 method.

Attribute Name: enable-auto-config

Attribute Type: boolean

Attribute Name: max-autoconfig-address

Attribute Type: uint8

Attribute Range: 1-64

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
```

```

        <name>IFNAME</name>
    </config>
    <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <config>
        <max-autoconfig-address>1</max-autoconfig-address> <!--
operation="delete"-->
        <enable-auto-config>true</enable-auto-config> <!-- operation="delete"-->
    </config>
    </ipv6>
</interface>
</interfaces>

```

## Command Syntax

```
ipv6 address autoconfig (max-address <1-64>|)
```

---

## Configure ipv6 unnumbered if name

Use this attribute to enable IP processing without an explicit address

This command is supported when following feature are enabled IPV6 feature

Attribute Name: ipv6-unnumbered-if-name

Attribute Type: string

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
    <name>IFNAME</name>
    <config>
        <name>IFNAME</name>
    </config>
    <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <config>
        <ipv6-unnumbered-if-name>IFNAME</ipv6-unnumbered-if-name> <!--
operation="delete"-->
    </config>
    </ipv6>
    </interface>
</interfaces>

```

## Command Syntax

```
ipv6 unnumbered IFNAME
```

---

## Configure enable dhcp ipv6 address

Use this attribute to specify that a DHCP client will be used to obtain an IP address for an interface.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: enable-dhcp-ipv6-address

Attribute Type: empty

**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <config>
      </enable-dhcp-ipv6-address><!-- operation="delete"-->
    </config>
  </ipv6>
</interface>
</interfaces>
```

**Command Syntax**

```
ipv6 address dhcp
```

---

**Configure enable dhcp temporary ipv6 address**

Use this attribute to specify that a DHCP client will be used to obtain an temporary IP address for an interface.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: enable-dhcp-temporary-ipv6-address

Attribute Type: empty

**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
    <config>
      </enable-dhcp-temporary-ipv6-address><!-- operation="delete"-->
    </config>
  </ipv6>
</interface>
</interfaces>
```

**Command Syntax**

```
ipv6 address dhcp temporary
```

---

**Configure dhcp address prefix length**

Use this attribute to configure the prefix length for the dynamically learnt ipv6 address

This command is supported when following feature are enabled IPV6 feature

Attribute Name: dhcp-address-prefix-length

Attribute Type: uint8

Attribute Range: 1-128

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <config>
        <dhcp-address-prefix-length>1</dhcp-address-prefix-length> <!--
operation="delete"-->
      </config>
    </ipv6>
  </interface>
</interfaces>
```

### Command Syntax

```
ipv6 dhcp address-prefix-length <1-128>
```

---

## Configure ipv6 address

Use this attribute to set the IPv6 address of an interface

This command is supported when following feature are enabled IPV6 feature

Attribute Name: ipv6-address

Attribute Type: string

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <addresses> <!-- operation="delete"-->
        <ipv6-address>X:X::X:X/M</ipv6-address>
      <config>
        <ipv6-address>X:X::X:X/M</ipv6-address>
      </config>
    </addresses>
  </ipv6>
</interface>
</interfaces>
```

## Command Syntax

```
ipv6 address X:X::X:X/M
```

---

## Configure anycast

Use this attribute to set the anycast flag for the IPv6 address of an interface. Anycast flag cannot be deleted for an IPv6 address once set. Please delete IPv6 address and reconfigure to remove anycast property.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: anycast

Attribute Type: empty

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ipv6 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
      <addresses>
        <ipv6-address>X:X::X:X/M</ipv6-address>
        <config>
          <ipv6-address>X:X::X:X/M</ipv6-address>
          </config>
          </anycast><!-- operation="delete"-->
        </addresses>
      </ipv6>
    </interface>
  </interfaces>
```

## Command Syntax

```
ipv6 address X:X::X:X/M anycast
```

---

## Configure disable ip forwarding

Enable IP forwarding for the router

Attribute Name: disable-ip-forwarding

Attribute Type: uint8

### Netconf edit-config payload

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <config>
    </disable-ip-forwarding><!-- operation="delete"-->
  </config>
</ip-global>
```

---

## Command Syntax

```
no ip forwarding
```

---

## Configure disable ipv6 forwarding

Enable IPv6 forwarding for the router

Attribute Name: disable-ipv6-forwarding

Attribute Type: uint8

### Netconf edit-config payload

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <config>
    </disable-ipv6-forwarding><!-- operation="delete"-->
  </config>
</ip-global>
```

## Command Syntax

```
no ipv6 forwarding
```

---

## Configure router id

Router id of the router - an unsigned 32-bit integer expressed in dotted quad notation

Attribute Name: router-id

Attribute Type: string

### Netconf edit-config payload

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <config>
    <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
  </config>
</ip-global>
```

## Command Syntax

```
router-id A.B.C.D
```

---

## Configure enable auto router id selection

Turn on Automatic Selection of Router ID

Attribute Name: enable-auto-router-id-selection

Attribute Type: empty

### Netconf edit-config payload

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <config>
    </enable-auto-router-id-selection><!-- operation="delete"-->
  </config>
```

```
</ip-global>
```

## Command Syntax

```
automatic-router-id-selection enable
```

---

## Configure default vrf enable icmp broadcast

This attribute is used to control ICMP echo broadcast reply. It ignores ICMP echo broadcast when set to true

Attribute Name: default-vrf-enable-icmp-broadcast

Attribute Type: empty

### Netconf edit-config payload

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <config>
    </default-vrf-enable-icmp-broadcast><!-- operation="delete"-->
  </config>
</ip-global>
```

## Command Syntax

```
ip icmp-broadcast
```

---

## Configure disable ip vrf forwarding

Turn on IP forwarding for the VRF instance

Attribute Name: disable-ip-vrf-forwarding

Attribute Type: uint8

### Netconf edit-config payload

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <vrf>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    </disable-ip-vrf-forwarding><!-- operation="delete"-->
  </vrf>
</ip-global>
```

## Command Syntax

```
no ip forwarding vrf NAME
```

---

## Configure disable ipv6 vrf forwarding

Turn on IPv6 forwarding for the VRF instance

Attribute Name: disable-ipv6-vrf-forwarding

Attribute Type: uint8

**Netconf edit-config payload**

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <vrf>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    </disable-ipv6-vrf-forwarding><!-- operation="delete"-->
  </vrf>
</ip-global>
```

**Command Syntax**

```
no ipv6 forwarding vrf NAME
```

---

**Configure enable icmp broadcast**

This attribute is used to control ICMP echo broadcast reply for VRF instance. It ignores ICMP echo broadcast when set to true

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: enable-icmp-broadcast

Attribute Type: empty

**Netconf edit-config payload**

```
<ip-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ip">
  <vrf>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    </enable-icmp-broadcast><!-- operation="delete"-->
  </vrf>
</ip-global>
```

**Command Syntax**

```
ip icmp-broadcast vrf NAME
```

---

**IPI-IF-EXTENDED**

---

**Configure protected port**

Attribute to change port protectedtype value

Attribute Name: protected-port

Attribute Type: enum (community|isolated|promiscuous)

Default Value: promiscuous



**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <config>
      <protected-port>promiscuous</protected-port>
    </config>
  </extended>
</interface>
</interfaces>
```

**Command Syntax**

```
switchport protected (isolated|promiscuous)
```

---

**Configure name**

Attribute to change port protectedtype value

Attribute Name: protected-port

Attribute Type: enum (community|isolated|promiscuous)

Default Value: promiscuous

**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <config>
      <protected-port>promiscuous</protected-port>
    </config>
  </extended>
</interface>
</interfaces>
```

**Command Syntax**

```
switchport protected (community|isolated|promiscuous)
```

---

**Configure link flap error disable**

This object specifies whether the interface is enabled for link-flap error-disable or not. If this is '0', then interface is not enabled. Otherwise it is enabled.

Attribute Name: link-flap-error-disable

Attribute Type: uint8

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        </link-flap-error-disable><!-- operation="delete"-->
      </config>
    </extended>
  </interface>
</interfaces>
```

### Command Syntax

```
no link-flap errdisable
```

---

## Configure storm control error disable

This attribute specifies whether the interface is enabled for storm-control error-disable or not. If this is not set, then the interface is not enabled. Otherwise it is enabled.

Attribute Name: storm-control-error-disable

Attribute Type: uint8

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        </storm-control-error-disable><!-- operation="delete"-->
      </config>
    </extended>
  </interface>
</interfaces>
```

### Command Syntax

```
no storm-control errdisable
```

---

## Configure mac move limit error disable

This object specifies whether the interface is enabled for mac-move-limit error-disable or not. If this is '0', then interface is not enabled. Otherwise it is enabled.

Attribute Name: mac-move-limit-error-disable

Attribute Type: uint8

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        </mac-move-limit-error-disable><!-- operation="delete"-->
      </config>
    </extended>
  </interface>
</interfaces>
```

### Command Syntax

```
no mac-move-limit errdisable
```

---

## Configure disable snmp trap link status

This Object is used to set the snmp trap link status in an interface

Attribute Name: disable-snmp-trap-link-status

Attribute Type: uint8

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        </disable-snmp-trap-link-status><!-- operation="delete"-->
      </config>
    </extended>
  </interface>
</interfaces>
```

### Command Syntax

```
no snmp trap link-status
```

---

## Configure mac move priority

This object used to set the priority of mac-move of an interface

Attribute Name: mac-move-priority

Attribute Type: uint32

Attribute Range: 1-255

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <mac-move-priority>1</mac-move-priority> <!-- operation="delete"-->
      </config>
    </extended>
  </interface>
</interfaces>
```

### Command Syntax

```
mac-move-limit priority <1-255>
```

---

## Configure mau default type

This attribute is used to set the mau type in an interface

Attribute Name: mau-default-type

Attribute Type: enum

(dot3MauType10BaseTHD|dot3MauType10BaseTFD|dot3MauType100BaseTXHD|dot3MauType100BaseTXFD|dot3MauType1000BaseXHD|dot3MauType1000BaseXFD|dot3MauType10GigBaseCX4|dot3MauType10GbaseKX4|dot3MauType10GbaseKR|dot3MauType40GbaseCR4)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <mau-default-type>dot3MauType10BaseTHD</mau-default-type> <!--
operation="delete"-->
      </config>
    </extended>
  </interface>
</interfaces>
```

## Command Syntax

```
mau-default-type
(dot3MauType10BaseTHD|dot3MauType10BaseTFD|dot3MauType100BaseTXHD|dot3MauType100
BaseTXFD|dot3MauType1000BaseXHD|dot3MauType1000BaseXFD|dot3MauType10GigBaseCX4|d
ot3MauType10GbaseKX4|dot3MauType10GbaseKR|dot3MauType40GbaseCR4)
```

---

## Configure debounce time

Use this attribute to set the interface debounce timer value

Attribute Name: debounce-time

Attribute Type: uint16

Attribute Range: 250-5000

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <config>
      <debounce-time>250</debounce-time> <!-- operation="delete"-->
    </config>
  </extended>
</interface>
</interfaces>
```

## Command Syntax

```
debounce-time <250-5000>
```

---

## Configure ucmp port

To enable UCMP support.

Attribute Name: ucmp-port

Attribute Type: enum (enable)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <config>
      <ucmp-port>enable</ucmp-port> <!-- operation="delete"-->
    </config>
  </extended>
</interface>
</interfaces>
```

```

    </config>
  </extended>
</interface>
</interfaces>

```

## Command Syntax

```
ucmp (enable)
```

---

## Configure enable re routing

Enable re-routing when the bandwidth crosses down the minimum bandwidth

Attribute Name: enable-re-routing

Attribute Type: empty

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <bandwidth-management>
        <config>
          </enable-re-routing><!-- operation="delete"-->
        </config>
      </bandwidth-management>
    </extended>
  </interface>
</interfaces>

```

## Command Syntax

```
re-routing
```

---

## Configure enable speed

This object is used to enable port-monitoring for the specified parameters, average speed of the interface

Attribute Name: enable-speed

Attribute Type: empty

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">

```

```

    <port-monitor>
    <config>
        </enable-speed><!-- operation="delete"-->
    </config>
</port-monitor>
</extended>
</interface>
</interfaces>

```

## Command Syntax

```
monitor speed
```

---

## Configure enable queue drops

This object is used to enable queue-drops of the interface

Attribute Name: enable-queue-drops

Attribute Type: empty

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
    <name>IFNAME</name>
    <config>
        <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <port-monitor>
    <config>
        </enable-queue-drops><!-- operation="delete"-->
    </config>
    </port-monitor>
    </extended>
    </interface>
</interfaces>

```

## Command Syntax

```
monitor queue-drops
```

---

## Configure warning threshold

This object is used to specify warning threshold for port speed monitor. Warning threshold must be greater than recovery threshold. Default value of warning-threshold is 90.

Attribute Name: warning-threshold

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: recovery-threshold

Attribute Type: uint8

Attribute Range: 1-100

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <port-monitor>
        <port-monitor-threshold>
          <config>
            <recovery-threshold>1</recovery-threshold>
            <warning-threshold>1</warning-threshold>
          </config>
        </port-monitor-threshold>
      </port-monitor>
    </extended>
  </interface>
</interfaces>
```

### Command Syntax

```
monitor speed threshold warning <1-100> recovery <1-100>
```

---

## Configure aclif type

Use this attribute to set the Hardware timestamp

Attribute Name: aclif-type

Attribute Type: enum (failover|no-failover)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <aclif>
        <config>
          <aclif-type>failover</aclif-type> <!-- operation="delete"-->
        </config>
      </aclif>
    </extended>
  </interface>
</interfaces>
```



## Command Syntax

```
aclif (failover|no-failover)
```

---

## Configure linkup debounce time

Link debounce timer value for down-up transition

Attribute Name: linkup-debounce-time

Attribute Type: uint16

Attribute Range: 0-5000

Attribute Name: linkdown-debounce-time

Attribute Type: uint16

Attribute Range: 0-5000

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <link-debounce-time>
        <config>
          <linkdown-debounce-time>0</linkdown-debounce-time>
          <linkup-debounce-time>0</linkup-debounce-time>
        </config>
      </link-debounce-time>
    </extended>
  </interface>
</interfaces>
```

## Command Syntax

```
link-debounce-time <0-5000> <0-5000>
```

---

## Configure l2cp type

This attribute is used to configure the layer2 control-protocol type

Attribute Name: l2cp-type

Attribute Type: enum (stp|lacp|dot1x|lldp|efm|elmi)

Attribute Name: protocol-process

Attribute Type: enum (peer|tunnel|discard)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
```

```

    <name>IFNAME</name>
    <config>
        <name>IFNAME</name>
    </config>
    <extended xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <l2-control-protocol> <!-- operation="delete"-->
        <l2cp-type>stp</l2cp-type>
        <config>
            <l2cp-type>stp</l2cp-type>
            <protocol-process>peer</protocol-process>
        </config>
    </l2-control-protocol>
</extended>
</interface>
</interfaces>

```

## Command Syntax

l2protocol (stp|lacp|dot1x|lldp|efm|elmi) (peer|tunnel|discard)

---

## Configure forward err correction

This Object is used to set forward-error-correction to interface

Attribute Name: forward-err-correction

Attribute Type: enum (off|on|auto|on cl74|on cl91)

Default Value: auto

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
    <name>IFNAME</name>
    <config>
        <name>IFNAME</name>
    </config>
    <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
        <extended-ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
            <config>
                <forward-err-correction>auto</forward-err-correction> <!--
operation="delete"-->
            </config>
        </extended-ethernet>
    </ethernet>
</interface>
</interfaces>

```

## Command Syntax

fec (off|on|auto|on cl74|on cl91)

---

## Configure load interval

This attribute is used to configure load interval period in multiples of 30 seconds

Attribute Name: load-interval

Attribute Type: uint16

Default Value: 300

Attribute Range: 30-300

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
      <extended-ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
        <config>
          <load-interval>30</load-interval> <!-- operation="delete"-->
        </config>
      </extended-ethernet>
    </ethernet>
  </interface>
</interfaces>
```

### Command Syntax

```
load-interval <30-300>
```

---

## Configure bcast value

This attribute is used to set the storm control configuration, Set Broadcast Rate Limiting of layer2 Interface

This command is supported when following feature are enabled rate limit feature

Attribute Name: bcast-value

Attribute Type: union

Attribute Name: bcast-rate-limit-format

Attribute Type: enum (level|kbps|mbps|gbps|fps)

Attribute Name: bcast-burst-value

Attribute Type: uint32

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
```

```

</config>
<ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
  <storm-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <broadcast>
      <config>
        <bcast-rate-limit-format>0</bcast-rate-limit-format>
        <bcast-burst-value>32</bcast-burst-value>
        <bcast-value>LEVEL</bcast-value>
      </config>
    </broadcast>
  </storm-control>
</ethernet>
</interface>
</interfaces>

```

## Command Syntax

```
storm-control broadcast level LEVEL (burst-size <32-128000>|)
```

## Configure bcast rate limit format

This attribute is used to set the storm control configuration, Set the format for units in kbps|mbps|gbps or level for threshold percentage

This command is supported when following feature are enabled rate limit feature

Attribute Name: bcast-rate-limit-format

Attribute Type: enum (level|kbps|mbps|gbps|fps)

Attribute Name: bcast-value

Attribute Type: union

Attribute Name: bcast-burst-value

Attribute Type: uint32

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
    <storm-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <broadcast>
        <config>
          <bcast-value>0</bcast-value>
          <bcast-burst-value>32</bcast-burst-value>
          <bcast-rate-limit-format>level</bcast-rate-limit-format>
        </config>
      </broadcast>
    </storm-control>
  </ethernet>
</interface>
</interfaces>

```

```

</ethernet>
</interface>
</interfaces>

```

## Command Syntax

```
storm-control broadcast <0-4294967294> (kbps|mbps|gbps|fps) (burst-size <32-128000>|)
```

---

## Configure mcast value

This attribute is used to set the storm control configuration, Set Multicast Rate Limiting of layer2 Interface

This command is supported when following feature are enabled rate limit feature

Attribute Name: mcast-value

Attribute Type: union

Attribute Name: mcast-rate-limit-format

Attribute Type: enum (level|kbps|mbps|gbps|fps)

Attribute Name: mcast-burst-value

Attribute Type: uint32

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
      <storm-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
        <multicast>
          <config>
            <mcast-rate-limit-format>0</mcast-rate-limit-format>
            <mcast-burst-value>32</mcast-burst-value>
            <mcast-value>LEVEL</mcast-value>
          </config>
        </multicast>
      </storm-control>
    </ethernet>
  </interface>
</interfaces>

```

## Command Syntax

```
storm-control multicast level LEVEL (burst-size <32-128000>|)
```

---

## Configure mcast rate limit format

This attribute is used to set the storm control configuration, Set the format for units in kbps|mbps|gbps or level for threshold percentage

This command is supported when following feature are enabled rate limit feature

Attribute Name: mcast-rate-limit-format

Attribute Type: enum (level|kbps|mbps|gbps|fps)

Attribute Name: mcast-value

Attribute Type: union

Attribute Name: mcast-burst-value

Attribute Type: uint32

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
      <storm-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
        <mcast>
          <config>
            <mcast-value>0</mcast-value>
            <mcast-burst-value>32</mcast-burst-value>
            <mcast-rate-limit-format>level</mcast-rate-limit-format>
          </config>
        </mcast>
      </storm-control>
    </ethernet>
  </interface>
</interfaces>
```

### Command Syntax

```
storm-control multicast <0-4294967294> (kbps|mbps|gbps|fps) (burst-size <32-128000>|)
```

## Configure dlf bcast value

This attribute is used to set the storm control configuration,Set DLF Broadcast Rate Limiting of layer2 Interface

This command is supported when following feature are enabled rate limit feature

Attribute Name: dlf-bcast-value

Attribute Type: union

Attribute Name: dlf-bcast-rate-limit-format

Attribute Type: enum (level|kbps|mbps|gbps|fps)

Attribute Name: dlf-bcast-burst-value

Attribute Type: uint32

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
    <storm-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <dlf-broadcast>
        <config>
          <dlf-bcast-rate-limit-format>0</dlf-bcast-rate-limit-format>
          <dlf-bcast-burst-value>32</dlf-bcast-burst-value>
          <dlf-bcast-value>LEVEL</dlf-bcast-value>
        </config>
      </dlf-broadcast>
    </storm-control>
  </ethernet>
</interface>
</interfaces>

```

**Command Syntax**

```
storm-control dlf level LEVEL (burst-size <32-128000>|)
```

**Configure dlf bcast rate limit format**

This attribute is used to set the storm control configuration, Set the format for units in kbps|mbps|gbps or level for threshold percentage

This command is supported when following feature are enabled rate limit feature

Attribute Name: dlf-bcast-rate-limit-format

Attribute Type: enum (level|kbps|mbps|gbps|fps)

Attribute Name: dlf-bcast-value

Attribute Type: union

Attribute Name: dlf-bcast-burst-value

Attribute Type: uint32

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <ethernet xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-ethernet">
    <storm-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <dlf-broadcast>
        <config>

```

```

        <dlf-bcast-value>0</dlf-bcast-value>
        <dlf-bcast-burst-value>32</dlf-bcast-burst-value>
        <dlf-bcast-rate-limit-format>level</dlf-bcast-rate-limit-format>
    </config>
</dlf-broadcast>
</storm-control>
</ethernet>
</interface>
</interfaces>

```

## Command Syntax

```
storm-control dlf <0-4294967294> (kbps|mbps|gbps|fps) (burst-size <32-128000>|)
```

## Configure error disable stp bpdu guard

This object is used to configure error disable STP BPDU Guard

Attribute Name: error-disable-stp-bpdu-guard

Attribute Type: boolean

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <error-disable>
      <config>
        <error-disable-stp-bpdu-guard>true</error-disable-stp-bpdu-guard> <!--
operation="delete"-->
      </config>
    </error-disable>
  </global>
</interfaces>

```

## Command Syntax

```
no errdisable cause stp-bpdu-guard
```

## Configure reason

This object is to enable various error-disable reasons like lag-mismatch, stp-bpdu-guard, link-flap and loopback-detection. As the datatype is BITS, 0th bit corresponds to lag-mismatch, 1st bit corresponds to stp-bpdu-guard, 2nd bit corresponds to link-flap

Attribute Name: reason

Attribute Type: bits (lag-mismatch|link-flap|mac-move-limit|storm-control)

Attribute Name: error-disable-stp-bpdu-guard

Attribute Type: boolean

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">

```



```

    <error-disable>
    <config>
        <error-disable-stp-bpdu-guard>true</error-disable-stp-bpdu-guard> <!--
operation="delete"-->
        <reason>lag-mismatch</reason> <!-- operation="delete"-->
    </config>
</error-disable>
</global>
</interfaces>

```

### Command Syntax

```
errdisable cause stp-bpdu-guard {lag-mismatch|link-flap|mac-move-limit|storm-
control}
```

---

## Configure link flap timer interval

This object is configure timer interval for link-flap timer

Attribute Name: link-flap-timer-interval

Attribute Type: uint32

Attribute Range: 1-1800

Attribute Name: link-flap-max-count

Attribute Type: uint32

Attribute Range: 1-100

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
<error-disable>
<config>
    <link-flap-max-count>1</link-flap-max-count> <!-- operation="delete"-->
    <link-flap-timer-interval>1</link-flap-timer-interval> <!--
operation="delete"-->
</config>
</error-disable>
</global>
</interfaces>

```

### Command Syntax

```
errdisable link-flap-setting max-flaps <1-100> time <1-1800>
```

---

## Configure storm control timer interval

This attribute is configure timer interval for storm-control timer

Attribute Name: storm-control-timer-interval

Attribute Type: uint32

Attribute Range: 1-1800

Attribute Name: storm-control-max-count

Attribute Type: uint32

Attribute Range: 1-100

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <error-disable>
      <config>
        <storm-control-max-count>1</storm-control-max-count> <!-- operation="delete"-->
      ->
        <storm-control-timer-interval>1</storm-control-timer-interval> <!--
operation="delete"-->
      </config>
    </error-disable>
  </global>
</interfaces>
```

### Command Syntax

```
errdisable storm-control discard-hit <1-100> time <1-1800>
```

---

## Configure timeout interval

This object is to configure timeout for error-disable automatic recovery timer

Attribute Name: timeout-interval

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-1000000

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <error-disable>
      <config>
        <timeout-interval>0</timeout-interval> <!-- operation="delete"-->
      </config>
    </error-disable>
  </global>
</interfaces>
```

### Command Syntax

```
errdisable timeout interval <0-1000000>
```

---

## Configure mac move limit

This object configures threshold for mac movement

Attribute Name: mac-move-limit

Attribute Type: uint32

Default Value: 100

Attribute Range: 1-1000

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <error-disable>
      <config>
        <mac-move-limit>1</mac-move-limit> <!-- operation="delete"-->
      </config>
    </error-disable>
  </global>
</interfaces>
```

### Command Syntax

```
errdisable mac-move-limit <1-1000>
```

---

## Configure mode

This attribute is used to unset the tunnel mode

This command is supported when following feature are enabled tunnel feature

Attribute Name: mode

Attribute Type: enum (vxlan)

Default Value: vxlan

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <mode>vxlan</mode> <!-- operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>
```

### Command Syntax

```
tunnel mode (vxlan)
```

---

## Configure src

This attribute is used to set tunnel source

This command is supported when following feature are enabled tunnel feature

Attribute Name: src

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <src>A.B.C.D</src> <!-- operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>
```

### Command Syntax

```
tunnel source A.B.C.D
```

---

## Configure multicast interface

This attribute is used to configure egress multicast interface for tunnel

This command is supported when following feature are enabled tunnel feature

Attribute Name: multicast-interface

Attribute Type: string

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <multicast-interface>IFNAME</multicast-interface> <!--
operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>
```

### Command Syntax

```
tunnel egress-multicast-interface IFNAME
```

---

## Configure dst

This attribute is used to set destination of tunnel packets

This command is supported when following feature are enabled tunnel feature

Attribute Name: dst

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <dst>A.B.C.D</dst> <!-- operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>
```

### Command Syntax

```
tunnel destination A.B.C.D
```

---

## Configure checksum enable

This attribute is used to enable end to end checksumming of packets

This command is supported when following feature are enabled tunnel feature

Attribute Name: checksum-enable

Attribute Type: empty

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        </checksum-enable><!-- operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>
```

---

## Command Syntax

```
tunnel checksum
```

---

## Configure tos byte

This attribute is used to set type of service byte

This command is supported when following feature are enabled tunnel feature

Attribute Name: tos-byte

Attribute Type: uint16

Attribute Range: 0-255

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        <tos-byte>0</tos-byte> <!-- operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>
```

## Command Syntax

```
tunnel tos <0-255>
```

---

## Configure ttl

This attribute is used to set time to live

This command is supported when following feature are enabled tunnel feature

Attribute Name: ttl

Attribute Type: uint16

Attribute Range: 1-255

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
```

```

        <ttl>1</ttl> <!-- operation="delete"-->
    </config>
</tunnel>
</interface>
</interfaces>

```

### Command Syntax

```
tunnel ttl <1-255>
```

---

## Configure path mtu enable

This attribute is used to enable Path MTU Discovery on tunnel

This command is supported when following feature are enabled tunnel feature

Attribute Name: path-mtu-enable

Attribute Type: empty

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
      <config>
        </path-mtu-enable><!-- operation="delete"-->
      </config>
    </tunnel>
  </interface>
</interfaces>

```

### Command Syntax

```
tunnel path-mtu-discovery
```

---

## Configure dst mac address

This attribute is used to set next Hop Destination MAC Address of Tunnel Packets

This command is supported when following feature are enabled tunnel feature

Attribute Name: dst-mac-address

Attribute Type: string

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>

```

```

    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <config>
        <dst-mac-address>MAC</dst-mac-address> <!-- operation="delete"-->
    </config>
    </tunnel>
</interface>
</interfaces>

```

## Command Syntax

```
tunnel dmac MAC
```

---

## Configure gre key

This attribute is used to set the gre-key for tunnel

This command is supported when following feature are enabled tunnel feature

Attribute Name: gre-key

Attribute Type: union

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
    <name>IFNAME</name>
    <config>
        <name>IFNAME</name>
    </config>
    <tunnel xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
    <config>
        <gre-key>IF_TUNNEL_KEY_T</gre-key>
    </config>
    </tunnel>
</interface>
</interfaces>

```

## Command Syntax

```
tunnel key (A.B.C.D|<0-4294967295>)
```

---

## Configure hit based ageing

Use this attribute to set the mac ageing src or dst-src

Attribute Name: hit-based-ageing

Attribute Type: enum (src|dst-src)

## Netconf edit-config payload

```

<mac-ageing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-extended">
<config>
    <hit-based-ageing>src</hit-based-ageing> <!-- operation="delete"-->

```



```
</config>
</mac-ageing>
```

## Command Syntax

```
mac-ageing (src|dst-src)
```

---

## clear interface (IFNAME|) cpu counters

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<clear-interface-cpu-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
if-extended">
  <if-name>IFNAME</if-name>
</clear-interface-cpu-counters>
```

## Command Syntax

```
clear interface (IFNAME|) cpu counters
```

---

## clear interface (IFNAME|) fec

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<clear-interface-forward-error-correction-counters xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-if-extended">
  <if-name>IFNAME</if-name>
</clear-interface-forward-error-correction-counters>
```

## Command Syntax

```
clear interface (IFNAME|) fec
```

---

## clear interface IFNAME error-disable

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<clear-interface-error-disable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
if-extended">
  <if-name>IFNAME</if-name>
</clear-interface-error-disable>
```

## Command Syntax

```
clear interface IFNAME error-disable
```

---

## clear l2protocol interface (IFNAME|) counters (peer|tunnel|discard|tunnel-discard|)

Attribute Name: if-name

Attribute Type: string

Attribute Name: protocol

Attribute Type: enum (peer|tunnel|discard|tunnel-discard|all)

Default Value: all

### Netconf RPC payload

```
<clear-l2protocol-interface-counter xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-if-extended">
  <if-name>IFNAME</if-name>
  <protocol>all</protocol>
</clear-l2protocol-interface-counter>
```

### Command Syntax

```
clear l2protocol interface (IFNAME|) counters (peer|tunnel|discard|tunnel-discard|)
```

---

## IPI-SYSTEM

---

### Configure hostname

Use this command to set the network name for the device. OcNOS uses this name in system prompts and default configuration filenames. Setting a host name using this command also sets the host name in the kernel. After giving the hostname command, you must write to memory using the write command. If you do not write to memory, the change made by this command (the new host name) is not set after the device reboots.

Attribute Name: hostname

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<system-info xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-system">
  <config>
    <hostname>WORD</hostname> <!-- operation="delete"-->
  </config>
</system-info>
```

### Command Syntax

```
hostname WORD
```

---

### Configure timezone name

The attribute display timezone name used for the system

Attribute Name: timezone-name

Attribute Type: string

### Netconf edit-config payload

```
<system-info xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-system">
  <clock>
    <config>
      <timezone-name>WORD</timezone-name> <!-- operation="delete"-->
    </config>
  </clock>
</system-info>
```

### Command Syntax

```
clock timezone WORD
```

---

## IPI-NETWORK-SERVICES-MANAGER

---

### Configure options

Use this attribute to debug nsm

Attribute Name: options

Attribute Type: bits (addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet detail|packet recv|packet recv detail|packet send|packet send detail|vxlan|ipsec|all)

### Netconf edit-config payload

```
<network-services-manager xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
services-manager">
  <debug>
    <nsm>
      <config>
        <options>addressmonitor</options> <!-- operation="delete"-->
      </config>
    </nsm>
  </debug>
</network-services-manager>
```

### Command Syntax

```
debug nsm ((addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet
  detail|packet recv|packet recv detail|packet send|packet send
  detail|vxlan|ipsec|all) |)
```

---

## Configure module name

Use this attribute to set debug HSL module

This command is supported when following feature are enabled HSL feature

Attribute Name: module-name

Attribute Type: enum

(general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lcp|qos|helper|rbridge|nvo|ofl|mlag|srv6|ptp|extphy)

Attribute Name: level

Attribute Type: bits (all|default|info|debug|warn|error|fatal|admin|counter|pkt)

### Netconf edit-config payload

```
<network-services-manager xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
services-manager">
  <debug>
    <hsl>
      <hsl-module> <!-- operation="delete"-->
        <module-name>general</module-name>
        <config>
          <module-name>general</module-name>
          <level>all</level>
        </config>
      </hsl-module>
    </hsl>
  </debug>
</network-services-manager>
```

### Command Syntax

```
debug hsl
  (general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lcp|qos|helper
  |rbridge|nvo|ofl|mlag|srv6|ptp|extphy)
  {all|default|info|debug|warn|error|fatal|admin|counter|pkt}
```

## debug nsm ((addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet detail|packet rcv|packet rcv detail|packet send|packet send detail|vxlan|ipsec|all))

Attribute Name: terminal-debug-options

Attribute Type: bits (addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet detail|packet rcv|packet rcv detail|packet send|packet send detail|vxlan|ipsec|all)

### Netconf RPC payload

```
<nsm-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
services-manager">
  <terminal-debug-options>addressmonitor</terminal-debug-options>
</nsm-terminal-debug-on>
```

### Command Syntax

```
debug nsm ((addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet
  detail|packet rcv|packet rcv detail|packet send|packet send
  detail|vxlan|ipsec|all))
```

---

**no debug nsm ((addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet detail|packet rcv|packet rcv detail|packet send|packet send detail|vxlan|ipsec|all))**

Attribute Name: terminal-debug-options

Attribute Type: bits (addressmonitor|bfd|events|hal events|hal ipc|linkmonitor|packet|packet detail|packet rcv|packet rcv detail|packet send|packet send detail|vxlan|ipsec|all)

### Netconf RPC payload

```
<nsm-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager">
  <terminal-debug-options>addressmonitor</terminal-debug-options>
</nsm-terminal-debug-off>
```

### Command Syntax

```
no debug nsm ((addressmonitor|bfd|events|hal events|hal
  ipc|linkmonitor|packet|packet detail|packet rcv|packet rcv detail|packet
  send|packet send detail|vxlan|ipsec|all))
```

---

## debug hsl

**(general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lacp|qos|helper|rbridge|nvo|ofl|mlag|srv6|ptp|extphy)  
{all|default|info|debug|warn|error|fatal|admin|counter|pkt}**

Attribute Name: module-name

Attribute Type: enum

(general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lacp|qos|helper|rbridge|nvo|ofl|mlag|srv6|ptp|extphy)

Attribute Name: level

Attribute Type: bits (all|default|info|debug|warn|error|fatal|admin|counter|pkt)

### Netconf RPC payload

```
<hsl-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager">
  <module-name>general</module-name>
  <level>all</level>
</hsl-terminal-debug-on>
```

### Command Syntax

```
debug hsl
  (general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lacp|qos|helper
  |rbridge|nvo|ofl|mlag|srv6|ptp|extphy)
  {all|default|info|debug|warn|error|fatal|admin|counter|pkt}
```

---

## no debug hsl

**(general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lacp|qos|help**

## er|rbridge|nvo|ofl|mlag|srv6|ptp|extphy) {all|default|info|debug|warn|error|fatal|admin|counter|pkt}

Attribute Name: module-name

Attribute Type: enum

(general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lacp|qos|helper|rbridge|nvo|ofl|mlag|srv6|ptp|extphy)

Attribute Name: level

Attribute Type: bits (all|default|info|debug|warn|error|fatal|admin|counter|pkt)

### Netconf RPC payload

```
<hsl-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
services-manager">
  <module-name>general</module-name>
  <level>all</level>
</hsl-terminal-debug-off>
```

### Command Syntax

```
no debug hsl
(general|ifmgr|bridge|msg|fib|fdb|devdrv|pktdrv|platform|pbr|bfd|lacp|qos|helper
|rbridge|nvo|ofl|mlag|srv6|ptp|extphy)
{all|default|info|debug|warn|error|fatal|admin|counter|pkt}
```

## debug pktmgr (l2 protocol cfm|l2 protocol eapol|l2 protocol efm|l2 protocol igmp-snoop|l2 protocol lacp|l2 protocol lldp|l2 protocol mldp-snoop|l2 protocol mstp|l2 protocol ptp|l2 protocol all)

Attribute Name: terminal-debug-options

Attribute Type: bits (l2 protocol cfm|l2 protocol eapol|l2 protocol efm|l2 protocol igmp-snoop|l2 protocol lacp|l2 protocol lldp|l2 protocol mldp-snoop|l2 protocol mstp|l2 protocol ptp|l2 protocol all)

### Netconf RPC payload

```
<pktmgr-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
network-services-manager">
  <terminal-debug-options>l2 protocol cfm</terminal-debug-options>
</pktmgr-terminal-debug-on>
```

### Command Syntax

```
debug pktmgr (l2 protocol cfm|l2 protocol eapol|l2 protocol efm|l2 protocol igmp-
snoop|l2 protocol lacp|l2 protocol lldp|l2 protocol mldp-snoop|l2 protocol
mstp|l2 protocol ptp|l2 protocol all)
```

## no debug pktmgr

### Netconf RPC payload

```
<pktmgr-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
network-services-manager"/>
```

---

**Command Syntax**

```
no debug pktmgr
```

---

**debug pktmgr enable****Netconf RPC payload**

```
<pktmgr-debug-statistics-enable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager"/>
```

**Command Syntax**

```
debug pktmgr enable
```

---

**debug pktmgr disable****Netconf RPC payload**

```
<pktmgr-debug-statistics-disable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager"/>
```

**Command Syntax**

```
debug pktmgr disable
```

---

**debug pktmgr stats****Netconf RPC payload**

```
<pktmgr-debug-statistics-get xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager"/>
```

**Command Syntax**

```
debug pktmgr stats
```

---

**debug pktmgr (stats|pkt-errors)**

Attribute Name: debug-error-statistics

Attribute Type: enum (stats|pkt-errors)

**Netconf RPC payload**

```
<pktmgr-debug-error-statistics-get xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager">  
  <debug-error-statistics>stats</debug-error-statistics>  
</pktmgr-debug-error-statistics-get>
```

**Command Syntax**

```
debug pktmgr (stats|pkt-errors)
```

---

## clear nsm ipc stats

### Netconf RPC payload

```
<clear-nsm-ipc-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager"/>
```

### Command Syntax

```
clear nsm ipc stats
```

---

## clear nsm server ipc-stats

### Netconf RPC payload

```
<clear-nsm-server-ipc-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager"/>
```

### Command Syntax

```
clear nsm server ipc-stats
```

---

## snmp restart nsm

### Netconf RPC payload

```
<nsm-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-services-manager"/>
```

### Command Syntax

```
snmp restart nsm
```

---

## IPI-BRIDGE

---

### Configure enable

Use this attribute to enable global bridge vlan check

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<global-bridge-vlan-check xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
  <global>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </global>
</global-bridge-vlan-check>
```



## Command Syntax

```
global-bridge-vlan-check enable
```

---

## Configure protocol

Bridge protocol type

Attribute Name: protocol

Attribute Type: enum (ieee|ieee vlan-bridge|rstp|rstp vlan-bridge|mstp|provider-rstp|provider-mstp|rpvst+|rstp ring|mstp ring|provider-rstp edge|provider-mstp edge|rstp vlan-bridge ring|evb|svlan-evb)

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <config>
        <protocol>ieee</protocol>
      </config>
    </bridge>
  </network-instance>
</network-instances>
```

## Command Syntax

```
bridge <1-32> protocol (ieee|ieee vlan-bridge|rstp|rstp vlan-
bridge|mstp|rpvst+|rstp ring|mstp ring|rstp vlan-bridge ring|evb|svlan-evb)
```

---

## Configure instance name

Bridge protocol type

Attribute Name: protocol

Attribute Type: enum (ieee|ieee vlan-bridge|rstp|rstp vlan-bridge|mstp|provider-rstp|provider-mstp|rpvst+|rstp ring|mstp ring|provider-rstp edge|provider-mstp edge|rstp vlan-bridge ring|evb|svlan-evb)

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
```

```

    <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <config>
      <protocol>ieee</protocol>
    </config>
  </bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```

bridge <1-32> protocol (ieee|ieee vlan-bridge|rstp|rstp vlan-bridge|mstp|provider-
rstp|provider-mstp|rpvst+|rstp ring|mstp ring|provider-rstp edge|provider-mstp
edge|rstp vlan-bridge ring|evb|svlan-evb)

```

---

## Configure disable dynamic learning

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: disable-dynamic-learning

Attribute Type: empty

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-type>vrf</instance-type>
    <config>
      <instance-type>vrf</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  <bridge>
    <config>
      </disable-dynamic-learning>
    </config>
  </bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```

no bridge <1-32> acquire

```

---

## Configure I2 protocol destination mac

This attribute changes L2 protocol destination MAC

Attribute Name: l2-protocol-destination-mac

Attribute Type: string

Default Value: 0100.C2CD.CDD0

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <config>
        <l2-protocol-destination-mac>XXXX.XXXX.XXXX</l2-protocol-destination-mac>
      <!-- operation="delete"-->
      </config>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge <1-32> l2protocol encapsulation dest-mac XXXX.XXXX.XXXX
```

## Configure spanning tree protocol status

Attribute specifies to enable/disable Spanning Tree Protocol on a interface

Attribute Name: spanning-tree-protocol-status

Attribute Type: enum (enable|disable)

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <bridge-ports>
        <interface>
          <name>WORD</name>
          <config>
            <name>WORD</name>
          </config>
        </interface>
      </bridge-ports>
    </bridge>
  </network-instance>
</network-instances>
```

```

        <spanning-tree-protocol-status>enable</spanning-tree-protocol-status>
    </interface>
</bridge-ports>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge-group <1-32> (spanning-tree (enable|disable) |)
```

---

## Configure disable mac learning

Use this attribute to disable MAC learning on a interface

Attribute Name: disable-mac-learning

Attribute Type: uint8

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <fdb>
        <interfaces>
          <interface>
            <interface-name>IFNAME</interface-name>
            <config>
              <interface-name>WORD</interface-name>
            </config>
            </disable-mac-learning><!-- operation="delete"-->
          </interface>
        </interfaces>
      </fdb>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
no mac-address-table learning bridge <1-32> interface IFNAME
```

---

## Configure interface name

The textual name of the interface

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: action

Attribute Type: enum (discard|forward)

### Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <fdb>
        <static-mac-table>
          <entry>
            <mac-address>XXXX.XXXX.XXXX</mac-address>
            <config>
              <mac-address>XXXX.XXXX.XXXX</mac-address>
              <action>discard</action>
            </config>
            <interface-name>IFNAME</interface-name>
          </entry>
        </static-mac-table>
      </fdb>
    </bridge>
  </network-instance>
</network-instances>

```

### Command Syntax

```
bridge <1-32> address XXXX.XXXX.XXXX (discard|forward) IFNAME
```

### clear mac address-table (multicast) cvlan VID svlan VID bridge <1-32>

Attribute Name: mac-type

Attribute Type: enum (multicast)

Attribute Name: cvlan-id

Attribute Type: uint16

Attribute Name: svlan-id

Attribute Type: uint16

Attribute Name: bridge-id

Attribute Type: string

**Netconf RPC payload**

```
<bridge-clear-provider-edge-mac-address-table xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-bridge">
  <mac-type>multicast</mac-type>
  <cvlan-id>VID</cvlan-id>
  <svlan-id>VID</svlan-id>
  <bridge-id>1</bridge-id>
</bridge-clear-provider-edge-mac-address-table>
```

**Command Syntax**

```
clear mac address-table (multicast) cvlan VID svlan VID bridge <1-32>
```

**clear mac address-table (multicast) (interface IFNAME|) (address MACADDR|) (vlan VID|) bridge <1-32>**

Attribute Name: mac-type

Attribute Type: enum (multicast)

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: mac-address

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Name: bridge-id

Attribute Type: string

**Netconf RPC payload**

```
<bridge-clear-mac-address-table xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
bridge">
  <mac-type>multicast</mac-type>
  <interface-name>IFNAME</interface-name>
  <mac-address>MACADDR</mac-address>
  <vlan-id>VID</vlan-id>
  <bridge-id>1</bridge-id>
</bridge-clear-mac-address-table>
```

**Command Syntax**

```
clear mac address-table (multicast) (interface IFNAME|) (address MACADDR|) (vlan
  VID|) bridge <1-32>
```

**clear mac address-table dynamic cvlan VID svlan VID bridge <1-32>**

Attribute Name: cvlan-id

Attribute Type: uint16

Attribute Name: svlan-id

Attribute Type: uint16

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<bridge-clear-provider-edge-dynamic-mac-address-table xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-bridge">
  <cvlan-id>VID</cvlan-id>
  <svlan-id>VID</svlan-id>
  <bridge-id>1</bridge-id>
</bridge-clear-provider-edge-dynamic-mac-address-table>
```

### Command Syntax

```
clear mac address-table dynamic cvlan VID svlan VID bridge <1-32>
```

---

## clear mac address-table dynamic (interface IFNAME|) (address MACADDR|) (vlan VID|) bridge <1-32>

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: mac-address

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<bridge-clear-dynamic-mac-address-table xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-bridge">
  <interface-name>IFNAME</interface-name>
  <mac-address>MACADDR</mac-address>
  <vlan-id>VID</vlan-id>
  <bridge-id>1</bridge-id>
</bridge-clear-dynamic-mac-address-table>
```

### Command Syntax

```
clear mac address-table dynamic (interface IFNAME|) (address MACADDR|) (vlan VID|)
bridge <1-32>
```

---

## clear allowed-ethertype statistics (IFNAME|)

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

### Netconf RPC payload

```
<bridge-clear-allowed-ethertype-stats xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
  <interface-name>IFNAME</interface-name>
</bridge-clear-allowed-ethertype-stats>
```

### Command Syntax

```
clear allowed-ethertype statistics (IFNAME|)
```

---

## clear mac address-table dynamic interface IFNAME instance INST bridge <1-32>

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: instance-id

Attribute Type: uint32

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<bridge-clear-mstp-port-dynamic-mac-address-table xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
  <interface-name>IFNAME</interface-name>
  <instance-id>INST</instance-id>
  <bridge-id>1</bridge-id>
</bridge-clear-mstp-port-dynamic-mac-address-table>
```

### Command Syntax

```
clear mac address-table dynamic interface IFNAME instance INST bridge <1-32>
```

---

## IPI-VLAN

---

### Configure disable mac learning

Use attribute to disable mac address learning

Attribute Name: disable-mac-learning

Attribute Type: uint8



**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <vlans xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
        <vlan>
          <vlan-id>VLAN_RANGE</vlan-id>
          <config>
            <vlan-id>VLAN_RANGE</vlan-id>
          </config>
          </disable-mac-learning><!-- operation="delete"-->
        </vlan>
      </vlans>
    </bridge>
  </network-instance>
</network-instances>

```

**Command Syntax**

```
no mac-address-table learning bridge <1-32> vlan VLAN_RANGE
```

---

**Configure vlan id**

Vlan identifier

Attribute Name: vlan-id

Attribute Type: string

Attribute Range: 2-4094

Attribute Name: type

Attribute Type: enum (customer)

Attribute Name: name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: state

Attribute Type: enum (disable|enable)

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>

```

```

<config>
  <instance-name>WORD</instance-name>
  <instance-type>l2ni</instance-type>
</config>
  <instance-type>l2ni</instance-type>
<bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
  <vlans xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
    <vlan> <!-- operation="delete"-->
      <vlan-id>VLAN_RANGE</vlan-id>
      <config>
        <vlan-id>VLAN_RANGE</vlan-id>
      </config>
      <customer-vlan>
        <config>
          <type>customer</type>
          <name>WORD</name>
          <state>disable</state>
        </config>
      </customer-vlan>
    </vlan>
  </vlans>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```

vlan VLAN_RANGE (type (customer)|) bridge <1-32> (name WORD|) (state
(disable|enable)|)

```

## Configure type

Vlan identifier

Attribute Name: vlan-id

Attribute Type: string

Attribute Range: 2-4094

Attribute Name: type

Attribute Type: enum (point-point|multipoint-multipoint|rooted-multipoint)

Attribute Name: state

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>

```

```

    <instance-type>l2ni</instance-type>
  </config>
  <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <vlans xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
      <vlan> <!-- operation="delete"-->
        <vlan-id>VLAN_RANGE</vlan-id>
        <config>
          <vlan-id>VLAN_RANGE</vlan-id>
        </config>
        <service-vlan>
          <config>
            <type>point-point</type>
            <state>disable</state>
          </config>
        </service-vlan>
      </vlan>
    </vlans>
  </bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```

vlan VLAN_RANGE type service (point-point|multipoint-multipoint|rooted-multipoint)
bridge <1-32> (state (disable|enable)|)

```

---

## Configure instance name

Vlan identifier

Attribute Name: vlan-id

Attribute Type: string

Attribute Range: 2-4094

Attribute Name: type

Attribute Type: enum (point-point|multipoint-multipoint|rooted-multipoint)

Attribute Name: name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: state

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>

```

```

    <instance-name>WORD</instance-name>
    <instance-type>l2ni</instance-type>
</config>
    <instance-type>l2ni</instance-type>
<bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <vlans xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
    <vlan> <!-- operation="delete"-->
        <vlan-id>VLAN_RANGE</vlan-id>
        <config>
            <vlan-id>VLAN_RANGE</vlan-id>
        </config>
        <service-vlan>
        <config>
            <type>point-point</type>
            <name>WORD</name>
            <state>disable</state>
        </config>
        </service-vlan>
    </vlan>
    </vlans>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```

vlan VLAN_RANGE type service (point-point|multipoint-multipoint|rooted-multipoint)
bridge <1-32> name WORD (state (disable|enable)|)

```

## Configure instance type

private vlan type

Attribute Name: type

Attribute Type: enum (community|isolated|primary)

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <vlans xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
    <vlan>
      <vlan-id>VLAN_RANGE</vlan-id>
      <config>

```

```

        <vlan-id>VLAN_RANGE</vlan-id>
    </config>
    <private-vlan>
    <config>
        <type>community</type>
    </config>
    </private-vlan>
</vlan>
</vlans>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
private-vlan <2-4094> (community|isolated|primary) bridge <1-32>
```

## Configure secondary vlan

Use this attribute to configure associated secondary vlan for private vlan

Attribute Name: secondary-vlan

Attribute Type: string

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <vlans xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
        <vlan>
          <vlan-id>VLAN_RANGE</vlan-id>
          <config>
            <vlan-id>VLAN_RANGE</vlan-id>
          </config>
          <private-vlan>
            <association>
              <config>
                <secondary-vlan>VLAN_ID</secondary-vlan> <!-- operation="delete"-->
              </config>
            </association>
          </private-vlan>
        </vlan>
      </vlans>
    </bridge>

```

```
</network-instance>
</network-instances>
```

## Command Syntax

```
private-vlan <2-4094> association add VLAN_ID bridge <1-32>
```

---

## Configure mac address

Use this attribute to configure classifier for given MAC address

This command is supported when following feature are enabled VLAN Classifier feature

Attribute Name: mac-address

Attribute Type: string

## Netconf edit-config payload

```
<vlan-classifier xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <classifier-rules>
    <classifier-rule>
      <rule-id>1</rule-id>
      <config>
        <rule-id>1</rule-id>
      </config>
    <rule-criteria>
      <config>
        <mac-address>WORD</mac-address> <!-- operation="delete"-->
      </config>
    </rule-criteria>
  </classifier-rule>
</classifier-rules>
</vlan-classifier>
```

## Command Syntax

```
vlan classifier rule <1-256> mac WORD
```

---

## Configure ipv4 address

Use this attribute to configure classifier for given IPv4 address

This command is supported when following feature are enabled VLAN Classifier feature

Attribute Name: ipv4-address

Attribute Type: string

## Netconf edit-config payload

```
<vlan-classifier xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <classifier-rules>
    <classifier-rule>
      <rule-id>1</rule-id>
      <config>
        <rule-id>1</rule-id>
      </config>
    </classifier-rule>
  </classifier-rules>
</vlan-classifier>
```

```

    </config>
  <rule-criteria>
    <config>
      <ipv4-address>A.B.C.D/M</ipv4-address> <!-- operation="delete"-->
    </config>
  </rule-criteria>
</classifier-rule>
</classifier-rules>
</vlan-classifier>

```

### Command Syntax

```
vlan classifier rule <1-256> ipv4 A.B.C.D/M
```

---

## Configure ether type

Use this attribute to configure classifier for protocols based on Ethertype value

This command is supported when following feature are enabled VLAN Classifier feature

Attribute Name: ether-type

Attribute Type: union

### Netconf edit-config payload

```

<vlan-classifier xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <classifier-rules>
    <classifier-rule>
      <rule-id>1</rule-id>
      <config>
        <rule-id>1</rule-id>
      </config>
    <rule-criteria>
      <config>
        <ether-type>VLAN_CLASSIFIER_ETHERTYPE_T</ether-type>
      </config>
    </rule-criteria>
  </classifier-rule>
</classifier-rules>
</vlan-classifier>

```

### Command Syntax

```

vlan classifier rule <1-256> proto
  (ETHERTYPE|ip|x25|arp|g8bpqx25|ieeepup|ieeeaddrtrans|dec|decnadamload|decnare
  moteconsole|decnارouting|declat|decdiagnostics|rarp|atalkddp|atalkarp|ipx|ipv6
  |atmmulti|pppdiscovery|pppsession|atmtransport)

```

---

## Configure group id

Classifier group ID

Attribute Name: group-id

Attribute Type: uint8

Attribute Range: 1-16

### Netconf edit-config payload

```
<vlan-classifier xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <classifier-groups>
    <classifier-group> <!-- operation="delete"-->
      <rule-id>1</rule-id>
      <config>
        <rule-id>1</rule-id>
        <group-id>1</group-id>
      </config>
    </classifier-group>
  </classifier-groups>
</vlan-classifier>
```

### Command Syntax

```
vlan classifier group <1-16> add rule <1-256>
```

---

## Configure port name

VLAN classifier group ID

Attribute Name: group-id

Attribute Type: uint8

Attribute Range: 1-16

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

### Netconf edit-config payload

```
<vlan-classifier xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <ports>
    <port> <!-- operation="delete"-->
      <group-id>1</group-id>
      <config>
        <group-id>1</group-id>
        <port-name>WORD</port-name>
        <vlan-id>2</vlan-id>
      </config>
    </port>
  </ports>
</vlan-classifier>
```

### Command Syntax

```
vlan classifier activate <1-16> vlan <2-4094>
```



---

## Configure disable vlan classifier feature

Use this command to enable or disable VLAN classifier feature.

Attribute Name: disable-vlan-classifier-feature

Attribute Type: uint8

### Netconf edit-config payload

```
<layer2-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <config>
    </disable-vlan-classifier-feature><!-- operation="delete"-->
  </config>
</layer2-global>
```

### Command Syntax

```
no feature vlan classifier
```

---

## Configure disable port security

Use this attribute to disable or enable port-security globally.

Attribute Name: disable-port-security

Attribute Type: uint8

### Netconf edit-config payload

```
<layer2-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <config>
    </disable-port-security>
  </config>
</layer2-global>
```

### Command Syntax

```
port-security disable
```

---

## Configure vlan xlate 1

Use this attribute to set vlan xlate

Attribute Name: vlan-xlate-1

Attribute Type: empty

### Netconf edit-config payload

```
<layer2-global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan">
  <config>
    </vlan-xlate-1><!-- operation="delete"-->
  </config>
</layer2-global>
```

### Command Syntax

```
vlan-xlate-1 large
```

---

## Configure table name

Use this to configure the name of the CVLAN registration table.

Attribute Name: table-name

Attribute Type: string

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <cvlan-registration-tables xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
vlan">
      <cvlan-registration-table> <!-- operation="delete"-->
        <table-name>WORD</table-name>
        <config>
          <table-name>WORD</table-name>
        </config>
      </cvlan-registration-table>
    </cvlan-registration-tables>
  </bridge>
</network-instance>
</network-instances>
```

### Command Syntax

```
cvlan registration table WORD bridge <1-32>
```

---

## Configure cvlan cfi

Canonical Format Indicator in the DEI field of the CTAG

This command is supported when following feature are enabled VLAN feature, Provider Bridging feature

Attribute Name: cvlan-cfi

Attribute Type: uint8

Attribute Range: 0-1

Attribute Name: translated-cvlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: svlan-cos

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: svlan-cfi

Attribute Type: uint8

Attribute Range: 0-1

Attribute Name: cvlan-cos

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <cvlan-registration-tables xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
vlan">
      <cvlan-registration-table>
        <table-name>WORD</table-name>
        <config>
          <table-name>WORD</table-name>
        </config>
        <cvlan-mappings>
          <cvlan-mapping>
            <cvlan-id>VLAN_RANGE2</cvlan-id>
            <config>
              <cvlan-id>VLAN_RANGE2</cvlan-id>
              <svlan-id>1</svlan-id>
              <translated-cvlan-id>1</translated-cvlan-id>
              <svlan-cos>0</svlan-cos>
              <svlan-cfi>0</svlan-cfi>
              <cvlan-cos>0</cvlan-cos>
            </config>
            <svlan-id>1</svlan-id>
            <cvlan-cfi>0</cvlan-cfi>
          </cvlan-mapping>
        </cvlan-mappings>
      </cvlan-registration-table>
    </cvlan-registration-tables>
  </bridge>
</network-instance>
</network-instances>
```

## Command Syntax

```
cvlan VLAN_RANGE2 cvlan <1-4094> svlan <1-4094> ({ scos <0-7>| scfi <0-1>| ccos <0-7>| ccfi <0-1> }|)
```

## Configure untagged ep

Customer/provider edge port is untagged for specified CVLAN

This command is supported when following feature are enabled VLAN feature, Provider Bridging feature

Attribute Name: untagged-ep

Attribute Type: bits (default|untagged-pep|untagged-cep)

Attribute Name: svlan-cos

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: svlan-cfi

Attribute Type: uint8

Attribute Range: 0-1

Attribute Name: cvlan-cos

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: cvlan-cfi

Attribute Type: uint8

Attribute Range: 0-1

## Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <cvlan-registration-tables xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
vlan">
      <cvlan-registration-table>
        <table-name>WORD</table-name>
        <config>
          <table-name>WORD</table-name>
        </config>
        <cvlan-mappings>
          <cvlan-mapping>
            <cvlan-id>VLAN_RANGE2</cvlan-id>
```

```

    <config>
      <cvlan-id>VLAN_RANGE2</cvlan-id>
      <svlan-id>1</svlan-id>
      <svlan-cos>0</svlan-cos>
      <svlan-cfi>0</svlan-cfi>
      <cvlan-cos>0</cvlan-cos>
      <cvlan-cfi>0</cvlan-cfi>
    </config>
    <svlan-id>1</svlan-id>
    <untagged-ep>untagged-pep</untagged-ep>
  </cvlan-mapping>
</cvlan-mappings>
</cvlan-registration-table>
</cvlan-registration-tables>
</bridge>
</network-instance>
</network-instances>

```

### Command Syntax

```

cvlan VLAN_RANGE2 svlan <1-4094> ({ scos <0-7>| scfi <0-1>| ccos <0-7>| ccfi <0-1>|
  untagged-pep|untagged-cep })

```

---

## IPI-PORT-VLAN

---

### Configure isolated vlan id

Isolated VLAN identifier

Attribute Name: isolated-vlan-id

Attribute Type: string

Attribute Range: 2-4094,2-4094

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <global>
        <config>
          <isolated-vlan-id>2</isolated-vlan-id> <!-- operation="delete"-->
        </config>
      </global>
    </port-vlan>
  </interface>
</interfaces>

```

## Command Syntax

```
switchport (provider-network) isolated-vlan WORD
```

---

## Configure cvlan registration table

cvlan registration table

Attribute Name: cvlan-registration-table

Attribute Type: string

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <global>
        <config>
          <cvlan-registration-table>WORD</cvlan-registration-table> <!--
operation="delete"-->
        </config>
      </global>
    </port-vlan>
  </interface>
</interfaces>
```

## Command Syntax

```
switchport (customer-edge) vlan registration WORD
```

---

## Configure interface mode

Set the interface to access or trunk or hybrid mode for VLANs

Attribute Name: interface-mode

Attribute Type: enum (access|hybrid|trunk|customer-network|provider-network|sbp|uap|customer-edge access|customer-edge hybrid|customer-edge trunk)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <switched-vlans>
        <switched-vlan> <!-- operation="delete"-->
          <interface-mode>access</interface-mode>
        </switched-vlan>
      </switched-vlans>
    </port-vlan>
  </interface>
</interfaces>
```

```

    <config>
      <interface-mode>access</interface-mode>
    </config>
  </switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```

switchport mode (access|hybrid|trunk|provider-network|customer-edge
access|customer-edge hybrid|customer-edge trunk)

```

---

## Configure name

Set the interface to access or trunk or hybrid mode for VLANs

Attribute Name: interface-mode

Attribute Type: enum (access|hybrid|trunk|customer-network|provider-network|sbp|uap|customer-edge access|customer-edge hybrid|customer-edge trunk)

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <switched-vlans>
        <switched-vlan> <!-- operation="delete"-->
          <interface-mode>access</interface-mode>
          <config>
            <interface-mode>access</interface-mode>
          </config>
        </switched-vlan>
      </switched-vlans>
    </port-vlan>
  </interface>
</interfaces>

```

## Command Syntax

```

switchport mode (customer-network)

```

---

## Configure acceptable frame type

Use this attribute to set the interface acceptable frame types. This processing occurs after VLAN classification

Attribute Name: acceptable-frame-type

Attribute Type: enum (vlan-tagged|all)

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
    <switched-vlans>
      <switched-vlan>
        <interface-mode>access</interface-mode>
        <config>
          <interface-mode>access</interface-mode>
        </config>
        <acceptable-frame-type>all</acceptable-frame-type> <!--
operation="delete"-->
      </switched-vlan>
    </switched-vlans>
  </port-vlan>
</interface>
</interfaces>

```

**Command Syntax**

```
switchport mode (hybrid) acceptable-frame-type (vlan-tagged|all)
```

**Configure disable native vlan**

Use this attribute to disable native VLAN for the port. Untagged frames will be dropped.

Attribute Name: disable-native-vlan

Attribute Type: uint8

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
    <switched-vlans>
      <switched-vlan>
        <interface-mode>access</interface-mode>
        <config>
          <interface-mode>access</interface-mode>
        </config>
        </disable-native-vlan><!-- operation="delete"-->
      </switched-vlan>
    </switched-vlans>
  </port-vlan>

```



```
</interface>
</interfaces>
```

## Command Syntax

```
switchport mode (trunk) disable-native-vlan
```

---

## Configure remove default vlan

Use this attribute to remove default VLAN for the port. Untagged frames will be dropped.

Attribute Name: remove-default-vlan

Attribute Type: uint8

## Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
    <switched-vlans>
    <switched-vlan>
      <interface-mode>access</interface-mode>
      <config>
        <interface-mode>access</interface-mode>
      </config>
      </remove-default-vlan><!-- operation="delete"-->
    </switched-vlan>
    </switched-vlans>
  </port-vlan>
</interface>
</interfaces>
```

## Command Syntax

```
switchport mode (trunk) remove-default-vlan
```

---

## Configure ingress filter

Use this attribute to set the switching characteristics of the interface as hybrid, and classify both tagged and untagged frames. Received frames are classified based on the VLAN characteristics, then accepted or discarded based on the specified filtering criteria.

Attribute Name: ingress-filter

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
```

```

<config>
  <name>IFNAME</name>
</config>
<port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
<switched-vlans>
<switched-vlan>
  <interface-mode>access</interface-mode>
  <config>
    <interface-mode>access</interface-mode>
  </config>
  <ingress-filter>disable</ingress-filter> <!-- operation="delete"-->
</switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```

switchport mode (access|hybrid|trunk|customer-network|provider-
network|sbp|uap|customer-edge access|customer-edge hybrid|customer-edge trunk)
ingress-filter (disable|enable)

```

---

## Configure vlan id

Default VLAN identifier

Attribute Name: vlan-id

Attribute Type: uint16

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
<switched-vlans>
<switched-vlan>
  <interface-mode>access</interface-mode>
  <config>
    <interface-mode>access</interface-mode>
  </config>
  <vlans>
  <config>
    <vlan-id>2</vlan-id> <!-- operation="delete"-->
  </config>
</vlans>
</switched-vlan>
</switched-vlans>

```

```

</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```
switchport (access|hybrid) vlan <2-4094>
```

---

## Configure native vlan id

Native VLAN ID

Attribute Name: native-vlan-id

Attribute Type: uint16

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
  <switched-vlans>
  <switched-vlan>
    <interface-mode>access</interface-mode>
    <config>
      <interface-mode>access</interface-mode>
    </config>
    <vlans>
    <config>
      <native-vlan-id>2</native-vlan-id> <!-- operation="delete"-->
    </config>
    </vlans>
  </switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```
switchport (trunk) native vlan <2-4094>
```

---

## Configure translated svlan id

Specifies translated service VLAN identifier

Attribute Name: translated-svlan-id

Attribute Type: uint16

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
  <switched-vlans>
  <switched-vlan>
    <interface-mode>access</interface-mode>
    <config>
      <interface-mode>access</interface-mode>
    </config>
    <svlan-translations>
    <svlan-translation>
      <original-svlan-id>VLAN_ID</original-svlan-id>
      <config>
        <original-svlan-id>VLAN_ID</original-svlan-id>
      </config>
      <translated-svlan-id>VLAN_ID</translated-svlan-id> <!--
operation="delete"-->
    </svlan-translation>
  </svlan-translations>
</switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

**Command Syntax**

```
switchport (customer-network) vlan translation svlan VLAN_ID svlan VLAN_ID
```

**Configure original svlan id**

Specifies translated service VLAN identifier

Attribute Name: translated-svlan-id

Attribute Type: uint16

Attribute Name: translated-cvlan-id

Attribute Type: uint16

Attribute Range: 1-4094

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>

```

```

</config>
<port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
<switched-vlans>
<switched-vlan>
  <interface-mode>access</interface-mode>
  <config>
    <interface-mode>access</interface-mode>
  </config>
  <svlan-translations>
  <svlan-translation>
    <original-svlan-id>VLAN_ID</original-svlan-id>
    <config>
      <original-svlan-id>VLAN_ID</original-svlan-id>
      <translated-cvlan-id>1</translated-cvlan-id> <!-- operation="delete"--
>
      </config>
      <translated-svlan-id>VLAN_ID</translated-svlan-id> <!--
operation="delete"-->
    </svlan-translation>
  </svlan-translations>
</switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```

switchport (customer-network) vlan translation svlan VLAN_ID cvlan <1-4094> svlan
VLAN_ID

```

## Configure cvlan id

Specifies translated service VLAN identifier

Attribute Name: translated-svlan-id

Attribute Type: uint16

Attribute Range: 1-4094

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
  <switched-vlans>
  <switched-vlan>
    <interface-mode>access</interface-mode>
    <config>

```

```

    <interface-mode>access</interface-mode>
  </config>
  <cvlan-svlan-translations>
  <cvlan-svlan-translation>
    <svlan-id>1</svlan-id>
    <config>
      <svlan-id>1</svlan-id>
      <cvlan-id>1</cvlan-id>
    </config>
    <cvlan-id>1</cvlan-id>
    <translated-svlan-id>1</translated-svlan-id>
  </cvlan-svlan-translation>
</cvlan-svlan-translations>
</switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```
switchport (customer-network) vlan translation cvlan <1-4094> svlan <1-4094> svlan
<1-4094>
```

---

## Configure svlan id

Specifies translated service VLAN identifier

Attribute Name: translated-svlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: translated-cvlan-id

Attribute Type: uint16

Attribute Range: 1-4094

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <switched-vlans>
        <switched-vlan>
          <interface-mode>access</interface-mode>
          <config>
            <interface-mode>access</interface-mode>
          </config>
          <cvlan-svlan-translations>

```

```

    <cvlan-svlan-translation>
      <svlan-id>1</svlan-id>
      <config>
        <svlan-id>1</svlan-id>
        <cvlan-id>1</cvlan-id>
        <translated-cvlan-id>1</translated-cvlan-id> <!-- operation="delete"-->
>
      </config>
      <cvlan-id>1</cvlan-id>
      <translated-svlan-id>1</translated-svlan-id> <!-- operation="delete"-->
>
    </cvlan-svlan-translation>
  </cvlan-svlan-translations>
</switched-vlan>
</switched-vlans>
</port-vlan>
</interface>
</interfaces>

```

### Command Syntax

```
switchport (customer-network) vlan translation cvlan <1-4094> svlan <1-4094> cvlan
<1-4094> svlan <1-4094>
```

## Configure logging

port security logging

Attribute Name: logging

Attribute Type: uint8

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <port-security>
        <config>
          </logging><!-- operation="delete"-->
        </config>
      </port-security>
    </port-vlan>
  </interface>
</interfaces>

```

### Command Syntax

```
switchport port-security logging enable
```

---

## Configure mode

port security mode type

Attribute Name: mode

Attribute Type: enum (static|default)

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <port-security>
        <config>
          <mode>2</mode>
        </config>
      </port-security>
    </port-vlan>
  </interface>
</interfaces>
```

### Command Syntax

```
switchport port-security
```

---

## Configure maximum limit

Maximum limit for port security

Attribute Name: maximum-limit

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-1000

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <port-security>
        <config>
          <maximum-limit>1</maximum-limit> <!-- operation="delete"-->
        </config>
      </port-security>
    </port-vlan>
  </interface>
</interfaces>
```



```

</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```
switchport port-security maximum <1-1000>
```

---

## Configure mac address

Use this attribute to configure the static forwarding entry for port-security

This command is supported when following feature are enabled Provider bridging feature

Attribute Name: mac-address

Attribute Type: string

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
  <port-security>
    <secure-mac>
      <default-vlan-mappings>
        <default-vlan-mapping> <!-- operation="delete"-->
          <mac-address>XXXX.XXXX.XXXX</mac-address>
          <config>
            <mac-address>XXXX.XXXX.XXXX</mac-address>
          </config>
        </default-vlan-mapping>
      </default-vlan-mappings>
    </secure-mac>
  </port-security>
</port-vlan>
</interface>
</interfaces>

```

## Command Syntax

```
switchport port-security mac-address XXXX.XXXX.XXXX
```

---

## Configure associate vlan id

Private VLAN Association

Attribute Name: associate-vlan-id

Attribute Type: uint16

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
  <private-vlan>
  <associations>
  <association>
    <vlan-id>2</vlan-id>
    <config>
      <vlan-id>2</vlan-id>
    </config>
    <associate-vlan-id>2</associate-vlan-id>
  </association>
</associations>
</private-vlan>
</port-vlan>
</interface>
</interfaces>

```

**Command Syntax**

```
switchport private-vlan host-association <2-4094> add <2-4094>
```

---

**Configure mapping vlan id**

Primary vlan identifier

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Name: mapping-vlan-id

Attribute Type: string

Attribute Range: 2-4094

**Netconf edit-config payload**

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
<interface>
  <name>IFNAME</name>
  <config>
    <name>IFNAME</name>
  </config>
  <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
  <private-vlan>
  <associations>
  <association> <!-- operation="delete"-->
    <vlan-id>2</vlan-id>
  </association>
  </associations>
</private-vlan>
</port-vlan>
</interface>
</interfaces>

```

```

        <vlan-id>2</vlan-id>
        <mapping-vlan-id>VLAN_ID</mapping-vlan-id>
    </config>
</association>
</associations>
</private-vlan>
</port-vlan>
</interface>
</interfaces>

```

### Command Syntax

```
switchport private-vlan mapping <2-4094> add VLAN_ID
```

---

## Configure association trunk vlan id

private-vlan Mapping

Attribute Name: association-trunk-vlan-id

Attribute Type: uint16

### Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <port-vlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
      <private-vlan>
        <associations>
          <association>
            <vlan-id>2</vlan-id>
            <config>
              <vlan-id>2</vlan-id>
            </config>
            <association-trunk-vlan-id>2</association-trunk-vlan-id>
          </association>
        </associations>
      </private-vlan>
    </port-vlan>
  </interface>
</interfaces>

```

### Command Syntax

```
switchport private-vlan association-trunk <2-4094> <2-4094>
```

---

## Configure instance name

Specifies VLAN identifier for static MAC entry in case of provider-network VLAN will be considered as service VLAN

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

Attribute Name: action

Attribute Type: enum (discard|forward)

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

### Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <vlan-static-fdb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-vlan">
        <entries>
          <entry>
            <vlan-id>2</vlan-id>
            <config>
              <vlan-id>2</vlan-id>
              <mac-address>XXXX.XXXX.XXXX</mac-address>
              <action>discard</action>
              <interface-name>IFNAME</interface-name>
            </config>
            <mac-address>XXXX.XXXX.XXXX</mac-address>
          </entry>
        </entries>
      </vlan-static-fdb>
    </bridge>
  </network-instance>
</network-instances>

```

### Command Syntax

```
bridge <1-32> address XXXX.XXXX.XXXX (discard|forward) IFNAME vlan <2-4094>
```

## IPI-VLAN-XC

### Configure xconnect name

This attribute uniquely identifies a cross connect on the device

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: xconnect-name

Attribute Type: string

Attribute Range: 1-30

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect> <!-- operation="delete"-->
    <xconnect-name>WORD</xconnect-name>
  <config>
    <xconnect-name>WORD</xconnect-name>
  </config>
</cross-connect>
</cross-connects>
```

### Command Syntax

```
cross-connect WORD
```

---

## Configure disable

Disable this cross connect

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: disable

Attribute Type: empty

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
  <config>
    <xconnect-name>WORD</xconnect-name>
  </config>
  </disable><!-- operation="delete"-->
</cross-connect>
</cross-connects>
```

### Command Syntax

```
disable
```

---

## Configure port endpoint 1

Configure port endpoint-1

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: port-endpoint-1

Attribute Type: string

Attribute Name: port-endpoint-2

Attribute Type: string

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  </cross-connect>
</cross-connects>
```

### Command Syntax

```
ep1 IFNAME ep2 IFNAME
```

---

## Configure backup endpoint 1

Configure backup endpoint-1

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: backup-endpoint-1

Attribute Type: string

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  </cross-connect>
</cross-connects>
```

### Command Syntax

```
backup ep1 IFNAME
```

---

## Configure backup endpoint 2

Configure backup endpoint-2

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: backup-endpoint-2

Attribute Type: string

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  <cross-connect-port-specific>
    <config>
      <backup-endpoint-2>IFNAME</backup-endpoint-2> <!-- operation="delete"-->
    </config>
  </cross-connect-port-specific>
</cross-connect>
</cross-connects>
```

### Command Syntax

```
backup ep2 IFNAME
```

---

## Configure revertive

Enable revertive operation for this XC

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: revertive

Attribute Type: empty

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  <cross-connect-port-specific>
    <config>
      </revertive><!-- operation="delete"-->
    </config>
  </cross-connect-port-specific>
</cross-connect>
</cross-connects>
```

## Command Syntax

```
cross-connect switchover type revertive
```

---

## Configure link fault pass through enable

Configure link fault pass through

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: link-fault-pass-through-enable

Attribute Type: empty

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  <cross-connect-port-specific>
    <config>
      </link-fault-pass-through-enable><!-- operation="delete"-->
    </config>
  </cross-connect-port-specific>
</cross-connect>
</cross-connects>
```

## Command Syntax

```
link-fault-pass-through enable
```

---

## Configure vlan endpoint 1

Configure vlan endpoint-1

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: vlan-endpoint-1

Attribute Type: string

Attribute Name: vlan-endpoint-2

Attribute Type: string

### Netconf edit-config payload

```
<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  <cross-connect-vlan>
    <config>
```



```

        <vlan-endpoint-2>IFNAME</vlan-endpoint-2>
        <vlan-endpoint-1>IFNAME</vlan-endpoint-1>
</config>
</cross-connect-vlan>
</cross-connect>
</cross-connects>

```

### Command Syntax

```
vlan ep1 IFNAME ep2 IFNAME
```

---

## Configure outer vlan range

Use this attribute to set the outer vlan id for XC.

Attribute Name: outer-vlan-range

Attribute Type: string

### Netconf edit-config payload

```

<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
<cross-connect>
  <xconnect-name>WORD</xconnect-name>
  <config>
    <xconnect-name>WORD</xconnect-name>
  </config>
<cross-connect-vlan>
<vlan-xc-entries>
<vlan-xc-entry> <!-- operation="delete"-->
  <inner-vlan-range>WORD</inner-vlan-range>
  <config>
    <inner-vlan-range>WORD</inner-vlan-range>
    <outer-vlan-range>WORD</outer-vlan-range>
  </config>
  <outer-vlan-range>WORD</outer-vlan-range>
</vlan-xc-entry>
</vlan-xc-entries>
</cross-connect-vlan>
</cross-connect>
</cross-connects>

```

### Command Syntax

```
outer-vlan WORD
```

---

## Configure inner vlan range

Use this attribute to set the inner vlan id for XC.

This command is supported when following feature are enabled VLAN XC support enabled

Attribute Name: inner-vlan-range

Attribute Type: string

**Netconf edit-config payload**

```

<cross-connects xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vlan-xc">
  <cross-connect>
    <xconnect-name>WORD</xconnect-name>
    <config>
      <xconnect-name>WORD</xconnect-name>
    </config>
  <cross-connect-vlan>
  <vlan-xc-entries>
  <vlan-xc-entry>
    <inner-vlan-range>WORD</inner-vlan-range>
    <config>
      <inner-vlan-range>WORD</inner-vlan-range>
      <outer-vlan-range>WORD</outer-vlan-range>
    </config>
    <outer-vlan-range>WORD</outer-vlan-range>
  </vlan-xc-entry>
</vlan-xc-entries>
</cross-connect-vlan>
</cross-connect>
</cross-connects>

```

**Command Syntax**

```
outer-vlan WORD inner-vlan WORD
```

**clear cross-connect counters (NAME|)**

Attribute Name: xc-name

Attribute Type: string

**Netconf RPC payload**

```

<clear-cross-connect-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
vlan-xc">
  <xc-name>NAME</xc-name>
</clear-cross-connect-counters>

```

**Command Syntax**

```
clear cross-connect counters (NAME|)
```

**IPI-XSTP****Configure ageing time**

Use this attribute to specify the aging-out time for a learned MAC address. The learned MAC address persists until this specified time. Setting value to 0 would disable ageing of the bridge.

Attribute Name: ageing-time

Attribute Type: union

Default Value: 300

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          <ageing-time>300</ageing-time> <!-- operation="delete"-->
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge <1-32> ageing disable
```

---

## Configure instance name

Use this attribute to specify the aging-out time for a learned MAC address. The learned MAC address persists until this specified time. Setting value to 0 would disable ageing of the bridge.

Attribute Name: ageing-time

Attribute Type: union

Default Value: 300

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          <ageing-time>300</ageing-time> <!-- operation="delete"-->
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

```

</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> ageing-time (0|<10-1000000>)
```

---

## Configure enable cisco interoperability

Use this attribute to enable/disable Cisco interoperability for MSTP (Multiple Spanning Tree Protocol). If Cisco interoperability is required, all devices in the switched LAN must be Cisco-interoperability enabled. When router interoperates with Cisco, the only criteria used to classify a region are the region name and revision level. VLAN-to-instance mapping is not used to classify regions when interoperating with Cisco.

Attribute Name: enable-cisco-interoperability

Attribute Type: empty

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          </enable-cisco-interoperability><!-- operation="delete"-->
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> cisco-interoperability enable
```

---

## Configure forwarding delay

Use this attribute to set the time (in seconds) after which (if this bridge is the root bridge) each port changes states to learning and forwarding. This value is used by all instances

Attribute Name: forwarding-delay

Attribute Type: uint8

Default Value: 15

Attribute Range: 4-30

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          <forwarding-delay>4</forwarding-delay> <!-- operation="delete"-->
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

**Command Syntax**

```
bridge <1-32> forward-time <4-30>
```

**Configure hello time**

Use this attribute to set the hello-time, the time in seconds after which (if this bridge is the root bridge) all the bridges in a bridged LAN exchange Bridge Protocol Data Units (BPDUs). A very low value of this parameter leads to excessive traffic on the network, while a higher value delays the detection of topology change. This value is used by all instances. Configure the bridge instance name before using this attribute. The allowable range of values is 1-10 seconds. However, make sure that the value of hello time is always greater than the value of hold time (2 seconds by default)

Attribute Name: hello-time

Attribute Type: uint8

Default Value: 2

Attribute Range: 1-10

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>

```

```

        <hello-time>1</hello-time> <!-- operation="delete"-->
    </config>
</stp>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> hello-time <1-10>
```

## Configure max age

Use this attribute to set the maximum age for a bridge. This value is used by all instances. Maximum age is the maximum time in seconds for which (if a bridge is the root bridge) a message is considered valid. This prevents the frames from looping indefinitely. The value of maximum age should be greater than twice the value of hello time plus 1, but less than twice the value of forward delay minus 1. The allowable range for max-age is 6-40 seconds. Configure this value sufficiently high, so that a frame generated by root can be propagated to the leaf nodes without exceeding the maximum age.

Attribute Name: max-age

Attribute Type: uint8

Default Value: 20

Attribute Range: 6-40

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          <max-age>6</max-age> <!-- operation="delete"-->
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> max-age <6-40>
```

## Configure max hops

Use this attribute to specify the maximum allowed hops for a BPDU in an MST region. This parameter is used by all the instances of the MST. Specifying the maximum hops for a BPDU prevents the messages from looping indefinitely in the network. When a bridge receives an MST BPDU that has exceeded the allowed maximum hops, it discards the BPDU.

Attribute Name: max-hops

Attribute Type: uint8

Default Value: 20

Attribute Range: 1-40

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          <max-hops>l</max-hops> <!-- operation="delete"-->
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge <1-32> max-hops <1-40>
```

## Configure bridge priority

Use this attribute to set the bridge priority for the common instance. Using a lower priority indicates a greater likelihood of the bridge becoming root. The priority values can be set only in increments of 4096.

Attribute Name: bridge-priority

Attribute Type: uint32

Default Value: 32768

Attribute Range: 0-61440

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
```

```

<config>
  <instance-name>WORD</instance-name>
  <instance-type>l2ni</instance-type>
</config>
  <instance-type>l2ni</instance-type>
<bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
  <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
    <config>
      <bridge-priority>0</bridge-priority> <!-- operation="delete"-->
    </config>
  </stp>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> priority <0-61440>
```

---

## Configure transmit hold count

Use this attribute to set the maximum number of transmissions of BPDUs by the transmit state machine

Attribute Name: transmit-hold-count

Attribute Type: uint8

Default Value: 6

Attribute Range: 1-10

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <config>
          <transmit-hold-count>l</transmit-hold-count> <!-- operation="delete"--
>
        </config>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> transmit-holdcount <1-10>
```



---

## Configure enable bpdu filter

All ports that have their BPDU filter set to default take the same value of BPDU filter as that of the bridge. The Spanning Tree Protocol sends BPDUs from all ports. Enabling the BPDU Filter feature ensures that PortFast-enabled ports do not transmit or receive any BPDUs.

Attribute Name: enable-bpdu-filter

Attribute Type: empty

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <global>
          <config>
            </enable-bpdu-filter><!-- operation="delete"-->
          </config>
        </global>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge <1-32> spanning-tree portfast bpdu-filter
```

---

## Configure enable bpdu guard

Use this attribute to set the portfast BPDU (Bridge Protocol Data Unit) guard or filter for the bridge

Attribute Name: enable-bpdu-guard

Attribute Type: empty

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
```

```

    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <global>
          <config>
            </enable-bpdu-guard><!-- operation="delete"-->
          </config>
        </global>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

### Command Syntax

```
bridge <1-32> spanning-tree portfast bpdu-guard
```

## Configure enable error disable timeout

Use this attribute to enable the error-disable-timeout facility, which sets a timeout for ports that are disabled due to the BPDU guard feature. The BPDU guard feature shuts down the port on receiving a BPDU on a BPDU-guard enabled port. This attribute associates a timer with the feature such that the port gets enabled back without manual intervention after a set interval.

Attribute Name: enable-error-disable-timeout

Attribute Type: empty

### Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <global>
          <config>
            </enable-error-disable-timeout><!-- operation="delete"-->
          </config>
        </global>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

### Command Syntax

```
bridge <1-32> spanning-tree errdisable-timeout enable
```

---

## Configure force version

Use this attribute to set the version for the bridge. A version identifier of less than a value of 2 enforces the spanning tree protocol. Although the attribute supports an input range of 0-4, for RSTP, the valid range is 0-2. When the force-version is set for a bridge, all ports of the bridge have the same spanning tree version set.

Attribute Name: force-version

Attribute Type: uint8

Default Value: 0

Attribute Range: 0-4

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <global>
          <config>
            <force-version>0</force-version> <!-- operation="delete"-->
          </config>
        </global>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge <1-32> spanning-tree force-version <0-4>
```

---

## Configure path cost method

Use this attribute to set a spanning-tree path cost method. If the short parameter is used, the switch uses a value for the default path cost a number in the range 1 through 65,535. If the long parameter is used, the switch uses a value for the default path cost a number in the range 1 through 200,000,000.

Attribute Name: path-cost-method

Attribute Type: enum (short|long|default)

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
```

```

    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <global>
          <config>
            <path-cost-method>default</path-cost-method> <!-- operation="delete"-->
          </config>
        </global>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> spanning-tree pathcost method (short|long)
```

## Configure bridge type

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: bridge-type

Attribute Type: enum (spanning-tree|rapid-spanning-tree|multiple-spanning-tree|rapid-pervlan-spanning-tree)

Attribute Name: disable-spanning-tree

Attribute Type: uint8

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>l2ni</instance-type>
    <config>
      <instance-type>l2ni</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  </network-instance>
</network-instances>

```

```

    <bridge-type>spanning-tree</bridge-type>
    </disable-spanning-tree>
  </bridge-admin>
</bridge-admins>
</global>
</stp>
</network-instance>
</network-instances>

```

## Command Syntax

```
no bridge <1-32> (rapid-spanning-tree|multiple-spanning-tree|rapid-pervlan-
spanning-tree) enable
```

## Configure disable spanning tree

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: bridge-type

Attribute Type: enum (spanning-tree|rapid-spanning-tree|multiple-spanning-tree|rapid-pervlan-spanning-tree)

Attribute Name: disable-spanning-tree

Attribute Type: uint8

Attribute Name: bridge-forwarding

Attribute Type: enum (bridge-blocked|bridge-forward)

Default Value: bridge-blocked

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>l2ni</instance-type>
    <config>
      <instance-type>l2ni</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  </network-instance>
</network-instances>
<stp>
</stp>
</global>
</bridge-admins>
</bridge-admin>
  <bridge-type>spanning-tree</bridge-type>
  </disable-spanning-tree>
  <config>
    <bridge-forwarding>bridge-blocked</bridge-forwarding>
  </config>
</bridge-admin>

```

```

    </config>
  </bridge-admin>
</bridge-admins>
</global>
</stp>
</network-instance>
</network-instances>

```

## Command Syntax

```
no bridge <1-32> (rapid-spanning-tree|multiple-spanning-tree|rapid-pervlan-
spanning-tree) enable (bridge-blocked|bridge-forward)
```

## Configure bridge forwarding

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: bridge-type

Attribute Type: enum (spanning-tree|rapid-spanning-tree|multiple-spanning-tree|rapid-pervlan-spanning-tree)

Attribute Name: disable-spanning-tree

Attribute Type: uint8

Attribute Name: bridge-forwarding

Attribute Type: enum (bridge-blocked|bridge-forward)

Default Value: bridge-blocked

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>l2ni</instance-type>
    <config>
      <instance-type>l2ni</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  </network-instance>
</network-instances>
<stp>
</stp>
<global>
</global>
<bridge-admins>
</bridge-admins>
<bridge-admin>
  <bridge-type>spanning-tree</bridge-type>
  </disable-spanning-tree>
  <config>
    <bridge-forwarding>bridge-blocked</bridge-forwarding>
  </config>
</bridge-admin>

```

```

    </bridge-admin>
  </bridge-admins>
</global>
</stp>
</network-instance>
</network-instances>

```

## Command Syntax

```
no bridge <1-32> spanning-tree enable (bridge-blocked|bridge-forward)
```

---

## Configure enable shutdown

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: enable-shutdown

Attribute Type: uint8

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>l2ni</instance-type>
    <config>
      <instance-type>l2ni</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  </network-instance>
</network-instances>
<stp>
</stp>
<global>
</global>
<bridge-shutdowns>
</bridge-shutdowns>
<bridge-shutdown>
  <enable-shutdown>
</enable-shutdown>
</bridge-shutdown>
</bridge-shutdowns>
</global>
</stp>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge shutdown <1-32>
```

---

## Configure region name

Use this attribute to create an MST region and specify its name. MST bridges of a region form different spanning trees for different VLANs.

Attribute Name: region-name

Attribute Type: string

Default Value: Default

Attribute Range: 1-32

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <mstp>
          <config>
            <region-name>REGION_NAME</region-name> <!-- operation="delete"-->
          </config>
        </mstp>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge <1-32> region REGION_NAME
```

---

## Configure revision number

Use this attribute to specify the number for configuration information.

Attribute Name: revision-number

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
```



```

    <instance-name>WORD</instance-name>
    <instance-type>l2ni</instance-type>
  </config>
  <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
      <mstp>
        <config>
          <revision-number>0</revision-number> <!-- operation="delete"-->
        </config>
      </mstp>
    </stp>
  </bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> revision <0-65535>
```

## Configure vlan id

Use this attribute to simultaneously add multiple VLANs for the corresponding instance of a bridge. The VLANs must be created before being associated with an MST instance (MSTI). If the VLAN range is not specified, the MSTI will not be created.

Attribute Name: vlan-id

Attribute Type: uint16

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <mstp>
          <mst-instances>
            <te-mst-instance>
              <config>
                <vlan-id>VLANID</vlan-id> <!-- operation="delete"-->
              </config>
            </te-mst-instance>
          </mst-instances>
        </mstp>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

```

</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> te-msti vlan VLANID
```

---

## Configure disable spanning tree

Use this attribute to disable spanning tree for TE MSTI instance

Attribute Name: disable-spanning-tree

Attribute Type: uint8

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <mstp>
          <mst-instances>
            <te-mst-instance>
              <config>
                </disable-spanning-tree><!-- operation="delete"-->
              </config>
            </te-mst-instance>
          </mst-instances>
        </mstp>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
no bridge <1-32> te-msti
```

---

## Configure name

The textual name of the interface

Attribute Name: name

Attribute Type: string

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>1</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>l2ni</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
      <mstp>
        <mst-instances>
          <te-mst-instance>
            <interfaces>
              <interface <!-- operation="delete"-->
                <name>WORD</name>
                <config>
                  <name>WORD</name>
                </config>
              </interface>
            </interfaces>
          </te-mst-instance>
        </mst-instances>
      </mstp>
    </stp>
  </bridge>
</network-instance>
</network-instances>

```

**Command Syntax**

```
bridge-group <1-32> instance te-msti
```

**Configure instance id**

Network Instance Name. For VRF and MAC VRF, instance name can be up to 32 chars long. For VPWS and VPLS instances, instance name can be up to 128 chars long. For L2NI (bridge) instance, instance name has to be a number between (1-32). For Cross-Connect, instance name can be up to 30 chars long. For Bridge-domain, instance, instance name has to be a number between (1-2147483647).

Attribute Name: instance-name

Attribute Type: string

Attribute Name: instance-id

Attribute Type: union

**Netconf edit-config payload**

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->

```

```

    <instance-type>l2ni</instance-type>
  <config>
    <instance-type>l2ni</instance-type>
    <instance-name>WORD</instance-name>
  </config>
  <instance-name>WORD</instance-name>
</stp>
</mstp>
<mst-instances>
<mst-instance>
  <instance-id>MSTP_INSTANCE_T</instance-id>
</mst-instance>
</mst-instances>
</mstp>
</stp>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> instance <1-63>
```

## Configure instance type

Use this attribute to simultaneously add multiple VLANs for the corresponding instance of a bridge. The VLANs must be created before being associated with an MST instance (MSTI). If the VLAN range is not specified, the MSTI will not be created.

Attribute Name: vlan-id

Attribute Type: string

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
  <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
    <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
      <mstp>
        <mst-instances>
          <mst-instance>
            <instance-id>MSTP_INSTANCE_T</instance-id>
            <config>
              <instance-id>MSTP_INSTANCE_T</instance-id>
            </config>
            <vlan-id>VLAN_RANGE</vlan-id> <!-- operation="delete"-->

```

```

    </mst-instance>
  </mst-instances>
</mstp>
</stp>
</bridge>
</network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> instance <1-63> vlan VLAN_RANGE
```

## Configure instance id

Use this attribute to simultaneously add multiple VLANs for the corresponding instance of a bridge. The VLANs must be created before being associated with an MST instance (MSTI). If the VLAN range is not specified, the MSTI will not be created.

Attribute Name: vlan-id

Attribute Type: string

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <mstp>
          <mst-instances>
            <mst-instance>
              <instance-id>MSTP_INSTANCE_T</instance-id>
              <config>
                <instance-id>MSTP_INSTANCE_T</instance-id>
              </config>
              <vlan-id>VLAN_RANGE</vlan-id> <!-- operation="delete"-->
            </mst-instance>
          </mst-instances>
        </mstp>
      </stp>
    </bridge>
  </network-instance>
</network-instances>

```

## Command Syntax

```
bridge <1-32> instance <1-62> vlan VLAN_RANGE
```

## Configure path cost

Use this attribute to set a path cost for a multiple spanning tree instance. Before using this attribute, you must explicitly add an MST instance to a port using the bridge-group instance attribute.

Attribute Name: path-cost

Attribute Type: uint32

Default Value: 20000000

Attribute Range: 1-200000000

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <mstp>
          <mst-instances>
            <mst-instance>
              <instance-id>MSTP_INSTANCE_T</instance-id>
              <config>
                <instance-id>MSTP_INSTANCE_T</instance-id>
              </config>
              <interfaces>
                <interface>
                  <name>WORD</name>
                  <config>
                    <name>WORD</name>
                  </config>
                  <path-cost>1</path-cost> <!-- operation="delete"-->
                </interface>
              </interfaces>
            </mst-instance>
          </mst-instances>
        </mstp>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge-group <1-32> instance <1-63> path-cost <1-200000000>
```

## Configure port priority

Use this attribute to set the bridge instance priority. The Multiple Spanning Tree Protocol uses port priority as a tiebreaker to determine which port should forward frames for a particular instance on a LAN, or which port should be the root port for an instance. A lower value implies a better priority. In the case of the same priority, the interface index will serve as the tiebreaker, with the lower-numbered interface being preferred over others.

Attribute Name: port-priority

Attribute Type: int16

Default Value: 128

Attribute Range: 0-240

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>l</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>l2ni</instance-type>
    <bridge xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bridge">
      <stp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
        <mstp>
          <mst-instances>
            <mst-instance>
              <instance-id>MSTP_INSTANCE_T</instance-id>
              <config>
                <instance-id>MSTP_INSTANCE_T</instance-id>
              </config>
              <interfaces>
                <interface>
                  <name>WORD</name>
                  <config>
                    <name>WORD</name>
                  </config>
                  <port-priority>0</port-priority> <!-- operation="delete"-->
                </interface>
              </interfaces>
            </mst-instance>
          </mst-instances>
        </mstp>
      </stp>
    </bridge>
  </network-instance>
</network-instances>
```

### Command Syntax

```
bridge-group <1-32> instance <1-63> priority <0-240>
```

---

## Configure port configuration

Use this attribute to set a port as an edge-port and to enable rapid transitions.

Attribute Name: port-configuration

Attribute Type: enum (edgeport|portfast)

Default Value: portfast

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <port-configuration>portfast</port-configuration> <!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

### Command Syntax

```
spanning-tree (edgeport|portfast)
```

---

## Configure enable automatic edge detection

Use this attribute to enable automatic edge detection.

Attribute Name: enable-automatic-edge-detection

Attribute Type: empty

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-automatic-edge-detection><!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

### Command Syntax

```
spanning-tree autoedge
```



---

## Configure bpdu guard

Use this attribute to set the portfast BPDU (Bridge Protocol Data Unit) guard or filter for the bridge. When the BPDU guard feature is set for a bridge, all portfast-enabled ports of the bridge that have the BPDU guard set to default shut down the port on receiving a BPDU. In this case, the BPDU is not processed. You can configure the errdisable-timeout feature to enable the port after the specified time interval.

Attribute Name: bpdu-guard

Attribute Type: enum (enable|disable|default)

Default Value: default

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <bpdu-guard>default</bpdu-guard> <!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

### Command Syntax

```
spanning-tree bpdu-guard (enable|disable|default)
```

---

## Configure bpdu filter

Use this attribute to set the portfast BPDU (Bridge Protocol Data Unit) guard or filter for the bridge. All ports that have their BPDU filter set to default take the same value of BPDU filter as that of the bridge. The Spanning Tree Protocol sends BPDUs from all ports. Enabling the BPDU Filter feature ensures that PortFast-enabled ports do not transmit or receive any BPDUs

Attribute Name: bpdu-filter

Attribute Type: enum (enable|disable|default)

Default Value: default

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <bpdu-filter>default</bpdu-filter> <!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

## Command Syntax

```
spanning-tree bpdu-filter (enable|disable|default)
```

---

## Configure enable root guard

Use this attribute to enable the root guard feature for the port. This feature disables reception of superior BPDUs. The root guard feature makes sure that the port on which it is enabled is a designated port. If the root guard enabled port receives a superior BPDU, it goes to a Listening state (for STP) or discarding state (for RSTP and MSTP).

Attribute Name: enable-root-guard

Attribute Type: empty

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-root-guard><!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

## Command Syntax

```
spanning-tree guard root
```

---

## Configure link type

Use this attribute to enable or disable point-to-point or shared link types. RSTP has a backward-compatible STP , spanning-tree link-type shared. An alternative is the spanning-tree force-version 0

Attribute Name: link-type

Attribute Type: enum (shared|point-to-point|auto)

Default Value: point-to-point

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <link-type>point-to-point</link-type> <!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

---

## Command Syntax

```
spanning-tree link-type (shared|point-to-point|auto)
```

---

## Configure enable restricted domain role

Use this attribute to set the restricted-domain-role value of the port to TRUE.

Attribute Name: enable-restricted-domain-role

Attribute Type: empty

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-restricted-domain-role><!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

## Command Syntax

```
spanning-tree restricted-domain-role
```

---

## Configure enable restricted role

Use this attribute to set the restricted-role value of the port to TRUE

Attribute Name: enable-restricted-role

Attribute Type: empty

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-restricted-role><!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

## Command Syntax

```
spanning-tree restricted-role
```

---

## Configure enable restricted tcn

Use this attribute to set the restricted TCN value of the port to TRUE

Attribute Name: enable-restricted-tcn

Attribute Type: empty

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-restricted-tcn><!-- operation="delete"-->
    </interface>
  </interfaces>
</xstp>
```

### Command Syntax

```
spanning-tree restricted-tcn
```

---

## Configure enable instance restricted tcn

Use this attribute to set the restricted TCN value for the instance to TRUE

Attribute Name: enable-instance-restricted-tcn

Attribute Type: uint8

### Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <mstp>
      <mst-instances>
        <mst-instance>
          <instance-id>MSTP_INSTANCE_T</instance-id>
          <config>
            <instance-id>MSTP_INSTANCE_T</instance-id>
            </enable-instance-restricted-tcn><!-- operation="delete"-->
          </config>
        </mst-instance>
      </mst-instances>
    </mstp>
  </interface>
```

```
</interfaces>
</xstp>
```

## Command Syntax

```
spanning-tree instance <1-63> restricted-tcn
```

---

## Configure enable instance restricted role

Use this attribute to set the restricted role value for the instance to TRUE

Attribute Name: enable-instance-restricted-role

Attribute Type: uint8

## Netconf edit-config payload

```
<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<mstp>
<mst-instances>
<mst-instance>
  <instance-id>MSTP_INSTANCE_T</instance-id>
  <config>
    <instance-id>MSTP_INSTANCE_T</instance-id>
    </enable-instance-restricted-role><!-- operation="delete"-->
  </mst-instance>
</mst-instances>
</mstp>
</interface>
</interfaces>
</xstp>
```

## Command Syntax

```
spanning-tree instance <1-63> restricted-role
```

---

## Configure forward delay

Use this attribute to set the time (in seconds) after which (if this bridge is the root bridge) each port changes states to learning and forwarding. This value is used by all instances

This command is supported when following feature are enabled provider bridge feature

Attribute Name: forward-delay

Attribute Type: uint8

Default Value: 15

Attribute Range: 4-30

**Netconf edit-config payload**

```

<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <customer-spanning-tree>
    <config>
      <forward-delay>4</forward-delay> <!-- operation="delete"-->
    </config>
    </customer-spanning-tree>
  </interface>
</interfaces>
</xstp>

```

**Command Syntax**

```
customer-spanning-tree forward-time <4-30>
```

---

**Configure svlan id**

Use this attribute to set the bridge path cost.

This command is supported when following feature are enabled provider bridge feature

Attribute Name: path-cost

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-200000000

**Netconf edit-config payload**

```

<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <customer-spanning-tree>
    <provider-edge>
    <vlans>
    <vlan>
      <svlan-id>0</svlan-id>
      <config>
        <svlan-id>2</svlan-id>
      </config>
      <path-cost>1</path-cost> <!-- operation="delete"-->
    </vlan>
  </vlans>

```

```

</provider-edge>
</customer-spanning-tree>
</interface>
</interfaces>
</xstp>

```

## Command Syntax

```
customer-spanning-tree provider-edge svlan <2-4094> path-cost <1-2000000000>
```

---

## Configure options

Debug configuration flag

Attribute Name: options

Attribute Type: bits (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)

## Netconf edit-config payload

```

<xstp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <mstp>
    <debug>
      <config>
        <options>mstp protocol</options> <!-- operation="delete"-->
      </config>
    </debug>
  </mstp>
</xstp>

```

## Command Syntax

```
debug (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet
tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)
```

---

## debug (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)

Attribute Name: terminal-debug-options

Attribute Type: bits (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)

## Netconf RPC payload

```

<mstp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <terminal-debug-options>mstp protocol</terminal-debug-options>
</mstp-terminal-debug-on>

```

## Command Syntax

```
debug (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet
tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)
```

---

## **no debug (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)**

Attribute Name: terminal-debug-options

Attribute Type: bits (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp packet tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)

### **Netconf RPC payload**

```
<mstp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <terminal-debug-options>mstp protocol</terminal-debug-options>
</mstp-terminal-debug-off>
```

### **Command Syntax**

```
no debug (mstp protocol|mstp protocol detail|mstp timer|mstp timer detail|mstp
packet tx|mstp packet rx|mstp cli|mstp bpdu|mstp mcec|mstp all)
```

---

## **clear spanning-tree detected protocols bridge <1-32>**

Attribute Name: bridge-id

Attribute Type: string

### **Netconf RPC payload**

```
<clear-spanning-tree-detected-protocols-per-bridge xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <bridge-id>1</bridge-id>
</clear-spanning-tree-detected-protocols-per-bridge>
```

### **Command Syntax**

```
clear spanning-tree detected protocols bridge <1-32>
```

---

## **clear spanning-tree detected protocols interface INTERFACE**

Attribute Name: interface-name

Attribute Type: string

### **Netconf RPC payload**

```
<clear-spanning-tree-detected-protocols-per-interface xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interface-name>INTERFACE</interface-name>
</clear-spanning-tree-detected-protocols-per-interface>
```

### **Command Syntax**

```
clear spanning-tree detected protocols interface INTERFACE
```

---

## **clear spanning-tree statistics (spbm|<1-63>) bridge <1-32>**

Attribute Name: mst-instance-id



Attribute Type: union

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<clear-spanning-tree-statistics-per-instance-and-bridge xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <mst-instance-id>MSTP_INSTANCE_SPBM_TYPE_T</mst-instance-id>
  <bridge-id>1</bridge-id>
</clear-spanning-tree-statistics-per-instance-and-bridge>
```

### Command Syntax

```
clear spanning-tree statistics (spbm|<1-63>) bridge <1-32>
```

---

## clear spanning-tree statistics interface IFNAME vlan <2-4094> bridge <1-32>

Attribute Name: interface-name

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<clear-spanning-tree-statistics-per-interface-vlan-and-bridge xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interface-name>IFNAME</interface-name>
  <vlan-id>2</vlan-id>
  <bridge-id>1</bridge-id>
</clear-spanning-tree-statistics-per-interface-vlan-and-bridge>
```

### Command Syntax

```
clear spanning-tree statistics interface IFNAME vlan <2-4094> bridge <1-32>
```

---

## clear spanning-tree statistics interface IFNAME bridge <1-32>

Attribute Name: interface-name

Attribute Type: string

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<clear-spanning-tree-statistics-per-interface-and-bridge xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interface-name>IFNAME</interface-name>
```

```
<bridge-id>1</bridge-id>
</clear-spanning-tree-statistics-per-interface-and-bridge>
```

## Command Syntax

```
clear spanning-tree statistics interface IFNAME bridge <1-32>
```

---

## clear spanning-tree statistics bridge <1-32>

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<clear-spanning-tree-statistics-per-bridge xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-xstp">
  <bridge-id>1</bridge-id>
</clear-spanning-tree-statistics-per-bridge>
```

## Command Syntax

```
clear spanning-tree statistics bridge <1-32>
```

---

## clear spanning-tree statistics vlan <2-4094> bridge <1-32>

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<clear-spanning-tree-statistics-per-vlan-and-bridge xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <vlan-id>2</vlan-id>
  <bridge-id>1</bridge-id>
</clear-spanning-tree-statistics-per-vlan-and-bridge>
```

## Command Syntax

```
clear spanning-tree statistics vlan <2-4094> bridge <1-32>
```

---

## clear spanning-tree statistics interface IFNAME (spbm|<1-63>) bridge <1-32>

Attribute Name: interface-name

Attribute Type: string

Attribute Name: mst-instance-id

Attribute Type: union

Attribute Name: bridge-id

Attribute Type: string

**Netconf RPC payload**

```
<clear-spanning-tree-statistics-per-interface-instance-and-bridge xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-xstp">
  <interface-name>IFNAME</interface-name>
  <mst-instance-id>MSTP_INSTANCE_SPBM_TYPE_T</mst-instance-id>
  <bridge-id>1</bridge-id>
</clear-spanning-tree-statistics-per-interface-instance-and-bridge>
```

**Command Syntax**

```
clear spanning-tree statistics interface IFNAME (spbm|<1-63>) bridge <1-32>
```

**snmp restart mstp****Netconf RPC payload**

```
<mstp-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-xstp"/>
```

**Command Syntax**

```
snmp restart mstp
```

---

**IPI-IF-AGGREGATE**

---

**Configure aggregate id**

Channel group identifier

Attribute Name: aggregate-id

Attribute Type: uint16

Attribute Range: 1-16383

Attribute Name: agg-type

Attribute Type: enum (lacp|static)

Attribute Name: lacp-mode

Attribute Type: enum (passive|active)

**Netconf edit-config payload**

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <member-aggregation xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-
aggregate">
      <config>
        <agg-type>2</agg-type>
        <lacp-mode>1</lacp-mode>
```

```

        <aggregate-id>1</aggregate-id>
    </config>
</member-aggregation>
</interface>
</interfaces>

```

## Command Syntax

```
static-channel-group <1-16383>
```

---

## Configure lacp mode

Use this command to add a port to a channel group specified by the channel group number (1-12). This command enables link aggregation on a port, so that it may be selected for aggregation by the local system.

Attribute Name: lacp-mode

Attribute Type: enum (passive|active)

Attribute Name: agg-type

Attribute Type: enum (lacp|static)

Attribute Name: aggregate-id

Attribute Type: uint16

Attribute Range: 1-16383

## Netconf edit-config payload

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <member-aggregation xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-
aggregate">
      <config>
        <agg-type>1</agg-type>
        <aggregate-id>1</aggregate-id>
        <lacp-mode>passive</lacp-mode>
      </config>
    </member-aggregation>
  </interface>
</interfaces>

```

## Command Syntax

```
channel-group <1-16383> mode (passive|active)
```

---

## Configure min links

Minimum number of active links required in this aggregator

Attribute Name: min-links

Attribute Type: uint8

Attribute Range: 2-32

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <aggregator xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-aggregate">
      <config>
        <min-links>2</min-links> <!-- operation="delete"-->
      </config>
    </aggregator>
  </interface>
</interfaces>
```

### Command Syntax

```
port-channel min-links <2-32>
```

---

## Configure min bandwidth

Minimum number of bandwidth required in this aggregator

Attribute Name: min-bandwidth

Attribute Type: string

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
    </config>
    <aggregator xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-if-aggregate">
      <config>
        <min-bandwidth>BANDWIDTH</min-bandwidth> <!-- operation="delete"-->
      </config>
    </aggregator>
  </interface>
</interfaces>
```

### Command Syntax

```
port-channel min-bandwidth BANDWIDTH
```

---

## IPI-LACP

---

### Configure system priority

Use this attribute to the system priority of this switch. This priority is used for determining the system that is responsible for resolving conflicts in the choice of aggregation groups. A lower numerical value has a higher priority.

Attribute Name: system-priority

Attribute Type: uint32

Default Value: 32768

Attribute Range: 0-65535

#### Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <global>
    <config>
      <system-priority>0</system-priority> <!-- operation="delete"-->
    </config>
  </global>
</lacp>
```

#### Command Syntax

```
lacp system-priority <0-65535>
```

---

### Configure options

This attribute returns the terminal debug options which are enabled

Attribute Name: options

Attribute Type: bits (event|cli|timer|packet|rx|tx|sync|ha|all)

#### Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <debug>
    <config>
      <options>event</options> <!-- operation="delete"-->
    </config>
  </debug>
</lacp>
```

#### Command Syntax

```
debug lacp (event|cli|timer|packet|rx|tx|sync|ha|all)
```

---

### Configure port priority

Use this attribute to set the priority of a channel. Channels are selected for aggregation based on their priority with the higher priority (numerically lower) channels selected first

Attribute Name: port-priority

Attribute Type: uint32

Default Value: 32768

Attribute Range: 1-65535

### Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <member-aggregation>
        <config>
          <port-priority>1</port-priority> <!-- operation="delete"-->
        </config>
      </member-aggregation>
    </interface>
  </interfaces>
</lacp>
```

### Command Syntax

```
lacp port-priority <1-65535>
```

---

## Configure timeout

Use this attribute to set either a short or long timeout value on a port. The timeout value is the number of seconds before invalidating a received LACP data unit (DU). If the LACP\_timeout bit (encoded in Actor\_State and Partner\_State fields) is set to 1, the short timeout takes effect; if set to 0, the long timeout takes effect.

Attribute Name: timeout

Attribute Type: enum (long|short)

Default Value: long

### Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <member-aggregation>
        <config>
          <timeout>long</timeout> <!-- operation="delete"-->
        </config>
      </member-aggregation>
    </interface>
  </interfaces>
</lacp>
```

```
</interfaces>
</lacp>
```

## Command Syntax

```
lacp timeout (long|short)
```

---

## Configure bridge type

Use this attribute to set the address type to use for sending LACPDUs (Link Aggregation Control Protocol Data Units).

Attribute Name: bridge-type

Attribute Type: enum (customer-bridge-group-address|multicast-group-address|non-tmpr-group-address)

Default Value: multicast-group-address

## Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<member-aggregation>
<config>
  <bridge-type>multicast-group-address</bridge-type> <!-- operation="delete"-->
</config>
</member-aggregation>
</interface>
</interfaces>
</lacp>
```

## Command Syntax

```
lacp destination-mac (customer-bridge-group-address|multicast-group-address|non-
tmpr-group-address)
```

---

## Configure force up

Use this attribute to enable the port as force-up in a channel group. Setting this attribute makes the port logically operational even if link aggregation goes down.

Attribute Name: force-up

Attribute Type: empty

## Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
```



```
</config>
<member-aggregation>
<config>
  </force-up><!-- operation="delete"-->
</config>
</member-aggregation>
</interface>
</interfaces>
</lacp>
```

### Command Syntax

```
lacp force-up
```

---

## Configure agg force up

Use this attribute to enable the port as lacp agg force-up

Attribute Name: agg-force-up

Attribute Type: empty

### Netconf edit-config payload

```
<lacp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<member-aggregation>
<config>
  </agg-force-up><!-- operation="delete"-->
</config>
</member-aggregation>
</interface>
</interfaces>
</lacp>
```

### Command Syntax

```
lacp agg force-up
```

---

## snmp restart lacp

### Netconf RPC payload

```
<lacp-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp"/>
```

### Command Syntax

```
snmp restart lacp
```

---

## clear lacp (<1-65535>|) counters

Attribute Name: aggregate-id

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf RPC payload

```
<clear-lacp-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <aggregate-id>1</aggregate-id>
</clear-lacp-counters>
```

### Command Syntax

```
clear lacp (<1-65535>|) counters
```

---

## debug lacp (event|cli|timer|packet|rx|tx|sync|ha|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|cli|timer|packet|rx|tx|sync|ha|all)

### Netconf RPC payload

```
<lacp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <terminal-debug-options>event</terminal-debug-options>
</lacp-terminal-debug-on>
```

### Command Syntax

```
debug lacp (event|cli|timer|packet|rx|tx|sync|ha|all)
```

---

## no debug lacp (event|cli|timer|packet|rx|tx|sync|ha|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|cli|timer|packet|rx|tx|sync|ha|all)

### Netconf RPC payload

```
<lacp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lacp">
  <terminal-debug-options>event</terminal-debug-options>
</lacp-terminal-debug-off>
```

### Command Syntax

```
no debug lacp (event|cli|timer|packet|rx|tx|sync|ha|all)
```

---

## IPI-LLDPV2

---

### Configure enable

Enable or disable the LLDP protocol at node level

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </global>
</lldp>
```

### Command Syntax

```
lldp run
```

---

## Configure notification interval

This object controls the interval between transmission of LLDP notifications during normal transmission periods

Attribute Name: notification-interval

Attribute Type: uint16

Default Value: 30

Attribute Range: 5-3600

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <config>
      <notification-interval>5</notification-interval> <!-- operation="delete"-->
    </config>
  </global>
</lldp>
```

### Command Syntax

```
lldp notification-interval <5-3600>
```

---

## Configure port description

This attribute specifies to include basic management port description information in LLDP TLV

Attribute Name: port-description

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-basic-management>
    </config>
```

```

    </port-description><!-- operation="delete"-->
</config>
</global-basic-management>
</global-tlv-control>
</global>
</lldp>

```

### Command Syntax

```
lldp tlv-select basic-mgmt port-description
```

---

## Configure system description

This attribute specifies to include basic management system description information in LLDP TLV

Attribute Name: system-description

Attribute Type: empty

### Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<global>
<global-tlv-control>
<global-basic-management>
<config>
  </system-description><!-- operation="delete"-->
</config>
</global-basic-management>
</global-tlv-control>
</global>
</lldp>

```

### Command Syntax

```
lldp tlv-select basic-mgmt system-description
```

---

## Configure system name

This attribute specifies to include basic management system name information in LLDP TLV

Attribute Name: system-name

Attribute Type: empty

### Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<global>
<global-tlv-control>
<global-basic-management>
<config>
  </system-name><!-- operation="delete"-->
</config>
</global-basic-management>
</global-tlv-control>

```

```
</global>
</lldp>
```

## Command Syntax

```
lldp tlv-select basic-mgmt system-name
```

---

## Configure system capabilities

This attribute specifies to include basic management system capabilities information in LLDP TLV

Attribute Name: system-capabilities

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-basic-management>
        <config>
          </system-capabilities><!-- operation="delete"-->
        </config>
      </global-basic-management>
    </global-tlv-control>
  </global>
</lldp>
```

## Command Syntax

```
lldp tlv-select basic-mgmt system-capabilities
```

---

## Configure management address

This attribute specifies to include basic management management-address information in LLDP TLV

Attribute Name: management-address

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-basic-management>
        <config>
          </management-address><!-- operation="delete"-->
        </config>
      </global-basic-management>
    </global-tlv-control>
  </global>
</lldp>
```

---

## Command Syntax

```
lldp tlv-select basic-mgmt management-address
```

---

## Configure port vlan id

This attribute specifies to include ieee-8021-org-specific port vlan-id information in LLDP TLV

Attribute Name: port-vlan-id

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </port-vlan-id><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

## Command Syntax

```
lldp tlv-select ieee-8021-org-specific port-vlanid
```

---

## Configure port protocol vlan id

This attribute specifies to include ieee-8021-org-specific port protocol vlan-id information in LLDP TLV

Attribute Name: port-protocol-vlan-id

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </port-protocol-vlan-id><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

## Command Syntax

```
lldp tlv-select ieee-8021-org-specific port-ptcl-vlanid
```

---

## Configure vlan name

This attribute specifies to include ieee-8021-org-specific vlan name information in LLDP TLV

Attribute Name: vlan-name

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </vlan-name><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

### Command Syntax

```
lldp tlv-select ieee-8021-org-specific vlan-name
```

---

## Configure protocol identifier

This attribute specifies to include ieee-8021-org-specific protocol identifier information in LLDP TLV

Attribute Name: protocol-identifier

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </protocol-identifier><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

### Command Syntax

```
lldp tlv-select ieee-8021-org-specific ptcl-identity
```

---

## Configure vid digest

This attribute specifies to include ieee-8021-org-specific vid usage digest information in LLDP TLV

Attribute Name: vid-digest

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </vid-digest><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

### Command Syntax

```
lldp tlv-select ieee-8021-org-specific vid-digest
```

---

## Configure management vlan id

This attribute specifies to include ieee-8021-org-specific management vlan-id information in LLDP TLV

Attribute Name: management-vlan-id

Attribute Type: empty

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </management-vlan-id><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

### Command Syntax

```
lldp tlv-select ieee-8021-org-specific mgmt-vid
```

---

## Configure link aggregation

This attribute specifies to include ieee-8021-org-specific link aggregation information in LLDP TLV

Attribute Name: link-aggregation

Attribute Type: empty



**Netconf edit-config payload**

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </link-aggregation><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

**Command Syntax**

```
lldp tlv-select ieee-8021-org-specific link-agg
```

---

**Configure dcb exchange**

This attribute specifies to include ieee-8021-org-specific data center bridging information in LLDP TLV

Attribute Name: dcb-exchange

Attribute Type: empty

**Netconf edit-config payload**

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
      <global-ieee-8021-org-specific>
        <config>
          </dcb-exchange><!-- operation="delete"-->
        </config>
      </global-ieee-8021-org-specific>
    </global-tlv-control>
  </global>
</lldp>
```

**Command Syntax**

```
lldp tlv-select ieee-8021-org-specific data-center-bridging
```

---

**Configure mac phy**

This attribute specifies to include ieee-8023-org-specific MAC or PHY information in LLDP TLV

Attribute Name: mac-phy

Attribute Type: empty

**Netconf edit-config payload**

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <global>
    <global-tlv-control>
```

```

<global-ieee-8023-org-specific>
<config>
  </mac-phy><!-- operation="delete"-->
</config>
</global-ieee-8023-org-specific>
</global-tlv-control>
</global>
</lldp>

```

### Command Syntax

```
lldp tlv-select ieee-8023-org-specific mac-phy
```

---

## Configure max mtu size

This attribute specifies to include ieee-8023-org-specific maximum mtu size information in LLDP TLV

Attribute Name: max-mtu-size

Attribute Type: empty

### Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<global>
<global-tlv-control>
<global-ieee-8023-org-specific>
<config>
  </max-mtu-size><!-- operation="delete"-->
</config>
</global-ieee-8023-org-specific>
</global-tlv-control>
</global>
</lldp>

```

### Command Syntax

```
lldp tlv-select ieee-8023-org-specific max-mtu-size
```

---

## Configure locally assigned chassis id

This attribute used to identify the chassis component associated with the local system

Attribute Name: locally-assigned-chassis-id

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<global>
<management-if>
<config>
  <locally-assigned-chassis-id>NAME</locally-assigned-chassis-id> <!--
operation="delete"-->

```

```

</config>
</management-if>
</global>
</lldp>

```

## Command Syntax

```
set lldp chassis locally-assigned NAME
```

---

## Configure options

This attribute returns the terminal debug options which are enabled

Attribute Name: options

Attribute Type: bits (event|rx|tx|message|ha|all)

### Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <debug>
    <config>
      <options>event</options> <!-- operation="delete"-->
    </config>
  </debug>
</lldp>

```

## Command Syntax

```
debug lldp (event|rx|tx|message|ha|all)
```

---

## Configure disable lldp agent

Use this attribute to disable LLDP on interface when it is enabled globally

Attribute Name: disable-lldp-agent

Attribute Type: uint8

### Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
        </config>
        </disable-lldp-agent><!-- operation="delete"-->
      </interface>
    </interfaces>
  </lldp>

```

## Command Syntax

```
lldp disable default-agent
```

---

## Configure agent circuit id

DHCP agent circuit ID association on interface

Attribute Name: agent-circuit-id

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <agent-circuit-id>VALUE</agent-circuit-id> <!-- operation="delete"-->
    </interface>
  </interfaces>
</lldp>
```

### Command Syntax

```
set lldp agt-circuit-id VALUE
```

---

## Configure med device type

LLDP-MED type of interface. Class-0 is not defined, Class-1 is for generic endpoints and is applicable to all endpoints that require the base LLDP discovery services. Class-2 is for media endpoints and it includes endpoints that have IP media capabilities. Class-3 is for communication endpoints i.e., devices acting as end user communication appliances. Class-4 is for Network Connectivity Device. Class 5-255 are Reserved

Attribute Name: med-device-type

Attribute Type: enum (ep-class1|ep-class2|ep-class3|net-connect)

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <med-device-type>ep-class1</med-device-type> <!-- operation="delete"-->
    </interface>
  </interfaces>
</lldp>
```

### Command Syntax

```
set lldp med-devtype (ep-class1|ep-class2|ep-class3|net-connect)
```

---

## Configure local name

Interface sub type with local name

Attribute Name: local-name

Attribute Type: string

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <local-name>NAME</local-name> <!-- operation="delete"-->
    </interface>
  </interfaces>
</lldp>
```

### Command Syntax

```
set lldp locally-assigned NAME
```

---

## Configure agent type

LLDP agent type on this interface

Attribute Name: agent-type

Attribute Type: enum (non-tpmr-bridge|customer-bridge|default)

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <agents>
        <agent> <!-- operation="delete"-->
          <agent-type>default</agent-type>
        </agent>
      </agents>
    </interface>
  </interfaces>
</lldp>
```

## Command Syntax

```
lldp-agent (non-tpmr-bridge|customer-bridge|)
```

---

## Configure enable tx rx

Enables interface with LLDP protocol and specifies to send and(or) receive packets on interface

Attribute Name: enable-tx-rx

Attribute Type: enum (rxonly|txonly|txrx)

Default Value: rxonly

## Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <agents>
      <agent>
        <agent-type>default</agent-type>
        <config>
          <agent-type>default</agent-type>
        </config>
        <enable-tx-rx>rxonly</enable-tx-rx> <!-- operation="delete"-->
      </agent>
    </agents>
  </interface>
</interfaces>
</lldp>
```

## Command Syntax

```
set lldp enable (rxonly|txonly|txrx)
```

---

## Configure dcbx enable

Use this attribute to enable/disable DCBX on the given interface

Attribute Name: dcbx-enable

Attribute Type: boolean

Default Value: false

## Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
```

```

        <name>WORD</name>
    </config>
</agents>
<agent>
    <agent-type>default</agent-type>
    <config>
        <agent-type>default</agent-type>
    </config>
    <dcbx-enable>true</dcbx-enable> <!-- operation="delete"-->
</agent>
</agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

dcbx (disable|enable)

---

## Configure reinit delay

The minimum time interval an LLDP port waits before re-initializing an LLDP transmission

Attribute Name: reinit-delay

Attribute Type: uint32

Default Value: 2

Attribute Range: 1-10

## Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
</interface>
</interfaces>
<agents>
<agent>
    <agent-type>default</agent-type>
    <config>
        <agent-type>default</agent-type>
    </config>
    <transmit>
    <config>
        <reinit-delay>1</reinit-delay> <!-- operation="delete"-->
    </config>
</transmit>
</agent>
</agents>
</interface>

```

```
</interfaces>
</lldp>
```

## Command Syntax

```
set lldp timer reinit-delay <1-10>
```

---

## Configure message tx interval

The delay between successive LLDP frame transmissions during normal transmission periods

Attribute Name: message-tx-interval

Attribute Type: uint32

Default Value: 30

Attribute Range: 5-3600

## Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</interface>
</interfaces>
<agents>
<agent>
  <agent-type>default</agent-type>
  <config>
    <agent-type>default</agent-type>
  </config>
  <transmit>
    <config>
      <message-tx-interval>5</message-tx-interval> <!-- operation="delete"-->
    </config>
  </transmit>
</agent>
</agents>
</interface>
</interfaces>
</lldp>
```

## Command Syntax

```
set lldp timer msg-tx-interval <5-3600>
```

---

## Configure message tx hold multiplier

Multiplier of message-tx-interval to determine the Time To Live (TTL) that is carried in LLDP frames transmitted by the LLDP agent

Attribute Name: message-tx-hold-multiplier



Attribute Type: uint32

Default Value: 4

Attribute Range: 1-100

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <transmit>
        <config>
          <message-tx-hold-multiplier>1</message-tx-hold-multiplier> <!--
operation="delete"-->
        </config>
      </transmit>
    </agent>
  </agents>
</lldp>
```

### Command Syntax

```
set lldp msg-tx-hold <1-100>
```

---

## Configure message fast tx

The interval at which LLDP frames are transmitted on behalf of LLDP agent during fast transmission periods

Attribute Name: message-fast-tx

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-3600

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
```

```

    </config>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <transmit>
        <config>
          <message-fast-tx>1</message-fast-tx> <!-- operation="delete"-->
        </config>
      </transmit>
    </agent>
  </agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
set lldp timer msg-fast-tx <1-3600>
```

---

## Configure tx credit max

The maximum number of consecutive LLDPDUs that can be transmitted at any time

Attribute Name: tx-credit-max

Attribute Type: uint32

Default Value: 5

Attribute Range: 1-10

## Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <transmit>
        <config>
          <tx-credit-max>1</tx-credit-max> <!-- operation="delete"-->
        </config>
      </transmit>
    </agent>
  </agents>
</lldp>

```

```
</agent>
</agents>
</interface>
</interfaces>
</lldp>
```

### Command Syntax

```
set lldp tx-max-credit <1-10>
```

---

## Configure tx fast init

The number of LLDPDU's to send during the fast transmission periods

Attribute Name: tx-fast-init

Attribute Type: uint32

Default Value: 4

Attribute Range: 1-8

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <transmit>
        <config>
          <tx-fast-init>1</tx-fast-init> <!-- operation="delete"-->
        </config>
      </transmit>
    </agent>
  </agents>
</lldp>
```

### Command Syntax

```
set lldp tx-fast-init <1-8>
```

---

## Configure neighbor timer

This attribute configures timer to discard received message when remote table is full

Attribute Name: neighbor-timer

Attribute Type: uint32

Attribute Range: 1-65535

Attribute Name: neighbor-limit

Attribute Type: uint32

Attribute Range: 1-65535

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<agents>
<agent>
  <agent-type>default</agent-type>
  <config>
    <agent-type>default</agent-type>
  </config>
  <receive>
    <config>
      <neighbor-limit>1</neighbor-limit> <!-- operation="delete"-->
      <neighbor-timer>1</neighbor-timer> <!-- operation="delete"-->
    </config>
  </receive>
</agent>
</agents>
</interface>
</interfaces>
</lldp>
```

### Command Syntax

```
set lldp too-many-neighbors limit <1-65535> discard received-info timer <1-65535>
```

## Configure port timer

This attribute configures timer to discard or delete existing info for received message port MAC when the remote table is full

Attribute Name: port-timer

Attribute Type: uint32

Attribute Range: 1-65535

Attribute Name: neighbor-limit

Attribute Type: uint32

Attribute Range: 1-65535

Attribute Name: port-mac

Attribute Type: string

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <receive>
        <config>
          <neighbor-limit>1</neighbor-limit> <!-- operation="delete"-->
          <port-mac>MAC</port-mac> <!-- operation="delete"-->
          <port-timer>1</port-timer> <!-- operation="delete"-->
        </config>
      </receive>
    </agent>
  </agents>
</lldp>
```

### Command Syntax

```
set lldp too-many-neighbors limit <1-65535> discard existing-info MAC timer <1-65535>
```

---

## Configure port address

This attribute specifies sub type of the Management Address TLV. Can be configured as mac-addresss or ip-address

Attribute Name: port-address

Attribute Type: enum (mac-address|ip-address)

Default Value: mac-address

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
```

```

    </config>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <agent-tlv>
        <config>
          <port-address>mac-address</port-address> <!-- operation="delete"-->
        </config>
      </agent-tlv>
    </agent>
  </agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
set lldp management-address-tlv (mac-address|ip-address)
```

---

## Configure chassis id

This attribute specifies chassis ID subtype for the LLDP agent on a port. Can be configured as if-alias or ip-address or mac-address or if-name or locally-assigned name

Attribute Name: chassis-id

Attribute Type: enum (if-alias|ip-address|mac-address|if-name|locally-assigned)

Default Value: mac-address

## Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <agent-tlv>
        <config>
          <chassis-id>mac-address</chassis-id> <!-- operation="delete"-->
        </config>
      </agent-tlv>
    </agent>
  </agents>
</lldp>

```

```

</agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
set lldp chassis-id-tlv (if-alias|ip-address|mac-address|if-name|locally-assigned)
```

---

## Configure port id

This attribute specifies sub type of the port id TLV. Can be configured as if-alias or mac-address or ip-address or if-name or agent-circuit-id or locally assigned name

Attribute Name: port-id

Attribute Type: enum (if-alias|mac-address|ip-address|if-name|agt-circuit-id|locally-assigned)

Default Value: mac-address

## Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</interface>
<agents>
<agent>
  <agent-type>default</agent-type>
  <config>
    <agent-type>default</agent-type>
  </config>
  <agent-tlv>
  <config>
    <port-id>mac-address</port-id> <!-- operation="delete"-->
  </config>
</agent-tlv>
</agent>
</agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
set lldp port-id-tlv (if-alias|mac-address|ip-address|if-name|agt-circuit-id|locally-assigned)
```

---

## Configure name

This attribute specifies to include basic management port description information in LLDP TLV

Attribute Name: port-description

Attribute Type: enum (not-set|select|unselect)

Default Value: not-set

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <tlv-control>
        <basic-management>
          <config>
            <port-description>not-set</port-description> <!-- operation="delete"-->
          </config>
        </basic-management>
      </tlv-control>
    </agent>
  </agents>
</lldp>
```

### Command Syntax

```
lldp tlv basic-mgmt port-description (select|unselect)
```

---

## Configure network policy

Network policy information configured on the port for connected media endpoint. Following network policy will be supported VLAN ID, Priority Tagging, VLAN DSCP

Attribute Name: network-policy

Attribute Type: enum (not-set|select|unselect)

Default Value: not-set

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
```



```

        <name>WORD</name>
    </config>
<agents>
<agent>
    <agent-type>default</agent-type>
    <config>
        <agent-type>default</agent-type>
    </config>
    <tlv-control>
    <tlv-media-capabilities>
    <config>
        <network-policy>not-set</network-policy> <!-- operation="delete"-->
    </config>
</tlv-media-capabilities>
</tlv-control>
</agent>
</agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
lldp tlv med network-policy (select|unselect)
```

---

## Configure location

Media Tlv type Location information configured for the port

Attribute Name: location

Attribute Type: enum (not-set|select|unselect)

Default Value: not-set

## Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
</interface>
</interfaces>
<agent>
    <agent-type>default</agent-type>
    <config>
        <agent-type>default</agent-type>
    </config>
    <tlv-control>
    <tlv-media-capabilities>
    <config>
        <location>not-set</location> <!-- operation="delete"-->
    </config>
    </tlv-media-capabilities>
    </tlv-control>
</agent>
</agents>
</lldp>

```

```

    </config>
  </tlv-media-capabilities>
</tlv-control>
</agent>
</agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
lldp tlv med location (select|unselect)
```

---

## Configure inventory

Includes the TLV for information like hardware revision, software revision etc based on the current hardware platform and the software version

Attribute Name: inventory

Attribute Type: enum (not-set|select|unselect)

Default Value: not-set

## Netconf edit-config payload

```

<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</interface>
</agents>
<agent>
  <agent-type>default</agent-type>
  <config>
    <agent-type>default</agent-type>
  </config>
  <tlv-control>
  <tlv-media-capabilities>
  <config>
    <inventory>not-set</inventory> <!-- operation="delete"-->
  </config>
</tlv-media-capabilities>
</tlv-control>
</agent>
</agents>
</interface>
</interfaces>
</lldp>

```

## Command Syntax

```
lldp tlv med inventory (select|unselect)
```

---

## Configure media capabilities

Includes various media-capabilities of the box for the neighbor

Attribute Name: media-capabilities

Attribute Type: enum (not-set|select|unselect)

Default Value: not-set

### Netconf edit-config payload

```
<lldp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <agents>
    <agent>
      <agent-type>default</agent-type>
      <config>
        <agent-type>default</agent-type>
      </config>
      <tlv-control>
        <tlv-media-capabilities>
          <config>
            <media-capabilities>not-set</media-capabilities> <!-- operation="delete"-->
          </config>
        </tlv-media-capabilities>
      </tlv-control>
    </agent>
  </agents>
</lldp>
```

### Command Syntax

```
lldp tlv med media-capabilities (select|unselect)
```

---

## debug lldp (event|rx|tx|message|ha|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|rx|tx|message|ha|all)

### Netconf RPC payload

```
<lldp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">
  <terminal-debug-options>event</terminal-debug-options>
</lldp-terminal-debug-on>
```

---

## Command Syntax

```
debug lldp (event|rx|tx|message|ha|all)
```

---

## no debug lldp (event|rx|tx|message|ha|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|rx|tx|message|ha|all)

### Netconf RPC payload

```
<lldp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
lldpv2">  
  <terminal-debug-options>event</terminal-debug-options>  
</lldp-terminal-debug-off>
```

## Command Syntax

```
no debug lldp (event|rx|tx|message|ha|all)
```

---

## clear lldp counters ((IFNAME|))

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<clear-lldp-counter xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2">  
  <interface-name>IFNAME</interface-name>  
</clear-lldp-counter>
```

## Command Syntax

```
clear lldp counters ((IFNAME|))
```

---

## snmp restart lldp

### Netconf RPC payload

```
<lldp-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-lldpv2"/>
```

## Command Syntax

```
snmp restart lldp
```

---

## IPI-RIB

---

## Configure fib retain

Use this attribute to configure retain time for stale routes (forever or specific time in seconds) in FIB after RIB restarts

Attribute Name: fib-retain

Attribute Type: union

Default Value: 60

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <global>
    <config>
      <fib-retain>60</fib-retain> <!-- operation="delete"-->
    </config>
  </global>
</routing>
```

### Command Syntax

```
fib retain (time <1-65535>|forever|)
```

---

## Configure max ecmp paths

Use this attribute to set the maximum number of paths to install in the FIB (Forwarding Information Base) for the ECMP (Equal-Cost MultiPath) feature.

Attribute Name: max-ecmp-paths

Attribute Type: uint8

Default Value: 8

Attribute Range: 1-64

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <global>
    <config>
      <max-ecmp-paths>1</max-ecmp-paths> <!-- operation="delete"-->
    </config>
  </global>
</routing>
```

### Command Syntax

```
maximum-paths <1-64>
```

---

## Configure max static routes

Use this attribute to set the maximum number of static routes.

Attribute Name: max-static-routes

Attribute Type: uint32

Default Value: 4294967294

Attribute Range: 1-4294967294

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
```

```
<global>
<config>
  <max-static-routes>1</max-static-routes> <!-- operation="delete"-->
</config>
</global>
</routing>
```

### Command Syntax

```
max-static-routes <1-4294967294>
```

---

## Configure max fib routes

Use this attribute to set the maximum number of FIB (Forwarding Information Base) routes excluding kernel, connected, and static routes.

Attribute Name: max-fib-routes

Attribute Type: uint32

Attribute Range: 1-16384

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
<global>
<config>
  <max-fib-routes>1</max-fib-routes> <!-- operation="delete"-->
</config>
</global>
</routing>
```

### Command Syntax

```
max-fib-routes <1-16384>
```

---

## Configure ipv4 enable bfd all interfaces

Use this attribute to enable static BFD on all interfaces.

Attribute Name: ipv4-enable-bfd-all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
<global>
<config>
  </ipv4-enable-bfd-all-interfaces><!-- operation="delete"-->
</config>
</global>
</routing>
```

### Command Syntax

```
ip bfd static all-interfaces
```

---

## Configure ipv6 enable bfd all interfaces

Use this attribute to enable ipv6 static BFD on all interfaces.

Attribute Name: ipv6-enable-bfd-all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <global>
    <config>
      </ipv6-enable-bfd-all-interfaces><!-- operation="delete"-->
    </config>
  </global>
</routing>
```

### Command Syntax

```
ipv6 bfd static all-interfaces
```

---

## Configure rib options

Use this attribute to debug the ribd process.

Attribute Name: rib-options

Attribute Type: bits (all|events|packet|packet send|packet rcv|packet detail|packet send detail|packet rcv detail|nsm|bfd|monitor|hal events)

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <debug>
    <config>
      <rib-options>all</rib-options> <!-- operation="delete"-->
    </config>
  </debug>
</routing>
```

### Command Syntax

```
debug rib (all|events|packet|packet send|packet rcv|packet detail|packet send
detail|packet rcv detail|nsm|bfd|monitor|hal events)
```

---

## Configure ipv4 routing options

Use this attribute to debug ip route.

Attribute Name: ipv4-routing-options

Attribute Type: bits (all|add-route|delete-route|mod-route)

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <debug>
```

```

<config>
  <ipv4-routing-options>all</ipv4-routing-options> <!-- operation="delete"-->
</config>
</debug>
</routing>

```

### Command Syntax

```
debug ip routing (all|add-route|delete-route|mod-route)
```

---

## Configure ipv6 routing options

Use this attribute to debug ipv6 route.

Attribute Name: ipv6-routing-options

Attribute Type: bits (all|add-route|delete-route|mod-route)

### Netconf edit-config payload

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <debug>
    <config>
      <ipv6-routing-options>all</ipv6-routing-options> <!-- operation="delete"-->
    </config>
  </debug>
</routing>

```

### Command Syntax

```
debug ipv6 routing (all|add-route|delete-route|mod-route)
```

---

## Configure interface name

Use this attribute to create an IPv4 static route where nexthop is interface name.

Attribute Name: interface-name

Attribute Type: string

### Netconf edit-config payload

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv4>
      <route-vrfs>
        <route-vrf> <!-- operation="delete"-->
          <interface-name>IFNAME</interface-name>
          <config>
            <interface-name>IFNAME</interface-name>
            <gateway-address>A.B.C.D</gateway-address>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
          </config>
          <gateway-address>A.B.C.D</gateway-address>
          <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
        </route-vrf>
      </route-vrfs>
    </ipv4>
  </static-routes>
</routing>

```



```

</route-vrfs>
</ipv4>
</static-routes>
</routing>

```

## Command Syntax

```
ip route (A.B.C.D/M|A.B.C.D A.B.C.D) A.B.C.D IFNAME
```

---

## Configure bfd state

Use this attribute to set fall-over detection.

Attribute Name: bfd-state

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
<static-routes>
<ipv4>
<routes>
<route>
  <gateway-address>A.B.C.D</gateway-address>
  <config>
    <gateway-address>A.B.C.D</gateway-address>
    <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
  </config>
  <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
  <bfd-state>disable</bfd-state> <!-- operation="delete"-->
</route>
</routes>
</ipv4>
</static-routes>
</routing>

```

## Command Syntax

```
ip static A.B.C.D/M A.B.C.D fall-over-bfd (disable|enable)
```

---

## Configure description

Use this attribute to set description of the static route.

Attribute Name: description

Attribute Type: string

Attribute Name: distance

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-255

Attribute Name: tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv4>
      <routes>
        <route>
          <gateway-address>A.B.C.D</gateway-address>
          <config>
            <gateway-address>A.B.C.D</gateway-address>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            <distance>1</distance> <!-- operation="delete"-->
            <tag>0</tag> <!-- operation="delete"-->
            <track-id>1</track-id> <!-- operation="delete"-->
          </config>
          <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
          <description>LINE</description> <!-- operation="delete"-->
        </route>
      </routes>
    </ipv4>
  </static-routes>
</routing>
```

### Command Syntax

```
ip route (A.B.C.D/M|A.B.C.D A.B.C.D) A.B.C.D (<1-255>|) (tag <0-4294967295>|)
(track <1-500>|) (description LINE|)
```

## Configure destination prefix

Use this attribute to set description of the static route.

Attribute Name: description

Attribute Type: string

Attribute Name: distance

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-255

Attribute Name: tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv4>
      <interface-routes>
        <interface-route>
          <interface-name>IFNAME</interface-name>
          <config>
            <interface-name>IFNAME</interface-name>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            <distance>1</distance> <!-- operation="delete"-->
            <tag>0</tag> <!-- operation="delete"-->
            <track-id>1</track-id> <!-- operation="delete"-->
          </config>
          <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
          <description>LINE</description> <!-- operation="delete"-->
        </interface-route>
      </interface-routes>
    </ipv4>
  </static-routes>
</routing>
```

### Command Syntax

```
ip route (A.B.C.D/M|A.B.C.D A.B.C.D) IFNAME (<1-255>|) (tag <0-4294967295>|) (track
<1-500>|) (description LINE|)
```

## Configure distance

Use this attribute to configure administrative distance for mroute.

Attribute Name: distance

Attribute Type: uint32

Attribute Range: 0-255

Attribute Name: gateway-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv4>
      <multicast-routes>
        <multicast-route>
          <protocol-type>default</protocol-type>
```

```

    <config>
      <protocol-type>default</protocol-type>
      <source-prefix>A.B.C.D/M</source-prefix>
      <gateway-address>A.B.C.D</gateway-address>
    </config>
    <source-prefix>A.B.C.D/M</source-prefix>
    <distance>0</distance>
  </multicast-route>
</multicast-routes>
</ipv4>
</static-routes>
</routing>

```

### Command Syntax

```
ip mroute A.B.C.D/M ((static|rip|ospf|bgp|isis)|) A.B.C.D (<0-255>|)
```

---

## Configure gateway address

Use this attribute to create an IPv6 static route for a subnet.

This command is supported when following feature are enabled ipv6 feature

Attribute Name: gateway-address

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv6>
      <routes>
        <route> <!-- operation="delete"-->
          <gateway-address>X:X::X:X</gateway-address>
          <config>
            <gateway-address>X:X::X:X</gateway-address>
            <destination-prefix>X:X::X:X/M</destination-prefix>
          </config>
          <destination-prefix>X:X::X:X/M</destination-prefix>
        </route>
      </routes>
    </ipv6>
  </static-routes>
</routing>

```

### Command Syntax

```
ipv6 route X:X::X:X/M X:X::X:X
```

---

## Configure track id

Use this attribute to set description of the static route.

This command is supported when following feature are enabled ipv6 feature

Attribute Name: description

Attribute Type: string

Attribute Name: distance

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-255

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

### Netconf edit-config payload

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv6>
      <routes>
        <route>
          <gateway-address>X:X::X:X</gateway-address>
          <config>
            <gateway-address>X:X::X:X</gateway-address>
            <destination-prefix>X:X::X:X/M</destination-prefix>
            <distance>1</distance> <!-- operation="delete"-->
            <track-id>1</track-id> <!-- operation="delete"-->
          </config>
          <destination-prefix>X:X::X:X/M</destination-prefix>
          <description>LINE</description> <!-- operation="delete"-->
        </route>
      </routes>
    </ipv6>
  </static-routes>
</routing>

```

### Command Syntax

```
ipv6 route X:X::X:X/M X:X::X:X (<1-255>|) (track <1-500>|) (description LINE|)
```

## Configure source prefix

Use this attribute to configure administrative distance for mroute.

This command is supported when following feature are enabled ipv6 feature

Attribute Name: distance

Attribute Type: uint32

Attribute Range: 0-255

Attribute Name: gateway-mroute

Attribute Type: inet:ipv6-address

**Netconf edit-config payload**

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <static-routes>
    <ipv6>
      <multicast-routes>
        <multicast-route>
          <protocol-type>default</protocol-type>
          <config>
            <protocol-type>default</protocol-type>
            <source-prefix>X:X::X:X/M</source-prefix>
          </config>
          <source-prefix>X:X::X:X/M</source-prefix>
        </multicast-route>
      </multicast-routes>
    </ipv6>
  </static-routes>
</routing>

```

**Command Syntax**

```
ipv6 mroute X:X::X:X/M ((static|rip|ospf|bgp|isis)|) X:X::X:X (<0-255>|)
```

**Configure ipv4 enable bfd**

Use this attribute to enable or disable Bidirectional Forwarding Detection static routes.

This command is supported when following feature are enabled bfd feature

Attribute Name: ipv4-enable-bfd

Attribute Type: enum (enable|disable)

**Netconf edit-config payload**

```

<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <bfd>
      <config>
        <ipv4-enable-bfd>enable</ipv4-enable-bfd> <!-- operation="delete"-->
      </config>
    </bfd>
  </interface>

```

```
</interfaces>
</routing>
```

## Command Syntax

```
ip static bfd (enable|disable)
```

---

## Configure ipv6 enable bfd

Use this attribute to enable or disable Bidirectional Forwarding Detection static routes.

This command is supported when following feature are enabled bfd feature

Attribute Name: ipv6-enable-bfd

Attribute Type: enum (enable|disable)

## Netconf edit-config payload

```
<routing xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <bfd>
      <config>
        <ipv6-enable-bfd>enable</ipv6-enable-bfd> <!-- operation="delete"-->
      </config>
    </bfd>
  </interface>
</interfaces>
</routing>
```

## Command Syntax

```
ipv6 static bfd (enable|disable)
```

---

## snmp restart rib

### Netconf RPC payload

```
<rib-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```

## Command Syntax

```
snmp restart rib
```

---

## clear ip route kernel

### Netconf RPC payload

```
<clear-ip-stale-kernel-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```

---

## Command Syntax

```
clear ip route kernel
```

---

## clear ip kernel route

### Netconf RPC payload

```
<clear-ip-kernel-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```

### Command Syntax

```
clear ip kernel route
```

---

## clear ipv6 route kernel

### Netconf RPC payload

```
<clear-ipv6-stale-kernel-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```

### Command Syntax

```
clear ipv6 route kernel
```

---

## clear ip route \*

### Netconf RPC payload

```
<clear-ip-route-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```

### Command Syntax

```
clear ip route *
```

---

## clear ip route A.B.C.D/M

Attribute Name: prefix-address

Attribute Type: string

### Netconf RPC payload

```
<clear-ip-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">  
<prefix-address>A.B.C.D/M</prefix-address>  
</clear-ip-route>
```

### Command Syntax

```
clear ip route A.B.C.D/M
```

---

## clear ipv4 route \*

### Netconf RPC payload

```
<clear-ipv4-route-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```



---

## Command Syntax

```
clear ipv4 route *
```

---

## clear ipv4 route A.B.C.D/M

Attribute Name: prefix-address

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv4-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <prefix-address>A.B.C.D/M</prefix-address>
</clear-ipv4-route>
```

---

## Command Syntax

```
clear ipv4 route A.B.C.D/M
```

---

## clear ipv6 route \*

### Netconf RPC payload

```
<clear-ipv6-route-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib"/>
```

### Command Syntax

```
clear ipv6 route *
```

---

## clear ipv6 route X:X::X:X/M

Attribute Name: prefix-ipv6-address

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv6-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
  <prefix-ipv6-address>X:X::X:X/M</prefix-ipv6-address>
</clear-ipv6-route>
```

---

## Command Syntax

```
clear ipv6 route X:X::X:X/M
```

---

## debug rib (all|events|packet|packet send|packet rcv|packet detail|packet send detail|packet rcv detail|nsm|bfd|monitor|hal events|hal ipc)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet|packet send|packet rcv|packet detail|packet send detail|packet rcv detail|nsm|bfd|monitor|hal events|hal ipc)

### Netconf RPC payload

```
<rib-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
```

```
<terminal-debug-options>all</terminal-debug-options>
</rib-terminal-debug-on>
```

### Command Syntax

```
debug rib (all|events|packet|packet send|packet recv|packet detail|packet send
detail|packet recv detail|nsm|bfd|monitor|hal events|hal ipc)
```

---

## no debug rib (all|events|packet|packet send|packet recv|packet detail|packet send detail|packet recv detail|nsm|bfd|monitor|hal events|hal ipc)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet|packet send|packet recv|packet detail|packet send detail|packet recv detail|nsm|bfd|monitor|hal events|hal ipc)

### Netconf RPC payload

```
<rib-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib">
<terminal-debug-options>all</terminal-debug-options>
</rib-terminal-debug-off>
```

### Command Syntax

```
no debug rib (all|events|packet|packet send|packet recv|packet detail|packet send
detail|packet recv detail|nsm|bfd|monitor|hal events|hal ipc)
```

---

## debug ip routing (all|add-route|delete-route|mod-route)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|add-route|delete-route|mod-route)

### Netconf RPC payload

```
<rib-terminal-debug-ipv4-routing-on xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-rib">
<terminal-debug-options>all</terminal-debug-options>
</rib-terminal-debug-ipv4-routing-on>
```

### Command Syntax

```
debug ip routing (all|add-route|delete-route|mod-route)
```

---

## no debug ip routing (all|add-route|delete-route|mod-route)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|add-route|delete-route|mod-route)

### Netconf RPC payload

```
<rib-terminal-debug-ipv4-routing-off xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-rib">
<terminal-debug-options>all</terminal-debug-options>
</rib-terminal-debug-ipv4-routing-off>
```

---

## Command Syntax

```
no debug ip routing (all|add-route|delete-route|mod-route)
```

---

## debug ipv6 routing (all|add-route|delete-route|mod-route)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|add-route|delete-route|mod-route)

### Netconf RPC payload

```
<rib-terminal-debug-ipv6-routing-on xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-rib">
  <terminal-debug-options>all</terminal-debug-options>
</rib-terminal-debug-ipv6-routing-on>
```

## Command Syntax

```
debug ipv6 routing (all|add-route|delete-route|mod-route)
```

---

## no debug ipv6 routing (all|add-route|delete-route|mod-route)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|add-route|delete-route|mod-route)

### Netconf RPC payload

```
<rib-terminal-debug-ipv6-routing-off xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-rib">
  <terminal-debug-options>all</terminal-debug-options>
</rib-terminal-debug-ipv6-routing-off>
```

## Command Syntax

```
no debug ipv6 routing (all|add-route|delete-route|mod-route)
```

---

# IPI-RIB-VRF

---

## Configure ipv4 enable bfd all interfaces

Use this attribute to enable static BFD on all interfaces.

Attribute Name: ipv4-enable-bfd-all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
```

```

    <instance-type>vrf</instance-type>
  </config>
  <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <config>
        </ipv4-enable-bfd-all-interfaces><!-- operation="delete"-->
      </config>
    </global>
  </vrf>
</network-instance>
</network-instances>

```

### Command Syntax

```
ip bfd vrf NAME static all-interfaces
```

---

## Configure ipv6 enable bfd all interfaces

Use this attribute to enable ipv6 static BFD on all interfaces.

Attribute Name: ipv6-enable-bfd-all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <global xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <config>
        </ipv6-enable-bfd-all-interfaces><!-- operation="delete"-->
      </config>
    </global>
  </vrf>
</network-instance>
</network-instances>

```

### Command Syntax

```
ipv6 bfd vrf NAME static all-interfaces
```

---

## Configure enable global table lookup

Use this attribute to create an IPv4 vrf static route with gateway in default vrf table.

Attribute Name: enable-global-table-lookup

Attribute Type: empty

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
        <ipv4>
          <gateway-interface-routes-global>
            <gateway-interface-route-global> <!-- operation="delete"-->
              </enable-global-table-lookup>
              <config>
                </enable-global-table-lookup>
                <interface-name>IFNAME</interface-name>
                <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
              </config>
                <interface-name>IFNAME</interface-name>
                <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            </gateway-interface-route-global>
          </gateway-interface-routes-global>
        </ipv4>
      </static-routes>
    </vrf>
  </network-instance>
</network-instances>
```

### Command Syntax

```
ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) IFNAME global
```

---

## Configure interface name

Use this attribute to create an IPv4 static route where nexthop is a global interface.

Attribute Name: interface-name

Attribute Type: string

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
```

```

    <instance-type>vrf</instance-type>
  </config>
  <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv4>
        <gateway-interface-routes-global>
          <gateway-interface-route-global>
            </enable-global-table-lookup>
            <config>
              </enable-global-table-lookup><!-- operation="delete"-->
              <interface-name>IFNAME</interface-name>
              <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            </config>
            <interface-name>IFNAME</interface-name>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
          </gateway-interface-route-global>
        </gateway-interface-routes-global>
      </ipv4>
    </static-routes>
  </vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) IFNAME global IFNAME
```

## Configure track id

Use this attribute to track a object.

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv4>
        <gateway-interface-routes-global>
          <gateway-interface-route-global>

```

```

    </enable-global-table-lookup>
    <config>
        </enable-global-table-lookup><!-- operation="delete"-->
        <interface-name>IFNAME</interface-name>
        <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
    </config>
        <interface-name>IFNAME</interface-name>
        <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
        <track-id>1</track-id> <!-- operation="delete"-->
    </gateway-interface-route-global>
</gateway-interface-routes-global>
</ipv4>
</static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) IFNAME global track <1-500>
```

## Configure bfd state

Use this attribute to set fall-over detection.

Attribute Name: bfd-state

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
    <network-instance>
        <instance-name>NAME</instance-name>
        <config>
            <instance-name>WORD</instance-name>
            <instance-type>vrf</instance-type>
        </config>
        <instance-type>vrf</instance-type>
        <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
            <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
                <ipv4>
                    <routes>
                        <route>
                            <gateway-address>A.B.C.D</gateway-address>
                            <config>
                                <gateway-address>A.B.C.D</gateway-address>
                                <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
                            </config>
                                <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
                                <bfd-state>disable</bfd-state> <!-- operation="delete"-->
                        </route>
                    </routes>
                </ipv4>
            </static-routes>
        </vrf>
    </network-instance>
</network-instances>

```

```

    </routes>
  </ipv4>
</static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip static vrf NAME A.B.C.D/M A.B.C.D fall-over-bfd (disable|enable)
```

## Configure instance type

Use this attribute to create an IPv4 static route where nexthop is interface name.

Attribute Name: interface-name

Attribute Type: string

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv4>
        <routes>
          <route>
            <gateway-address>A.B.C.D</gateway-address>
            <config>
              <gateway-address>A.B.C.D</gateway-address>
              <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            </config>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            <gateway-interface-routes>
              <gateway-interface-route> <!-- operation="delete"-->
                <interface-name>IFNAME</interface-name>
                <config>
                  <interface-name>IFNAME</interface-name>
                </config>
              </gateway-interface-route>
            </gateway-interface-routes>
          </route>
        </routes>
      </ipv4>
    </static-routes>
  </vrf>
</network-instance>
</network-instances>

```



```

</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip route vrf NAME A.B.C.D/M A.B.C.D IFNAME
```

## Configure description

Use this attribute to set description of the static route.

Attribute Name: description

Attribute Type: string

Attribute Name: distance

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-255

Attribute Name: tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv4>
        <routes>
          <route>
            <gateway-address>A.B.C.D</gateway-address>
            <config>
              <gateway-address>A.B.C.D</gateway-address>
              <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            </config>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
          </route>
        </routes>
      </ipv4>
    </static-routes>
  </vrf>
</network-instance>
</network-instances>

```

```

    <gateway-interface-routes>
    <gateway-interface-route>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>IFNAME</interface-name>
        <distance>1</distance> <!-- operation="delete"-->
        <tag>0</tag> <!-- operation="delete"-->
        <track-id>1</track-id> <!-- operation="delete"-->
      </config>
      <description>LINE</description> <!-- operation="delete"-->
    </gateway-interface-route>
  </gateway-interface-routes>
</route>
</routes>
</ipv4>
</static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) A.B.C.D IFNAME (<1-255>|) (tag <0-4294967295>|) (track <1-500>|) (description LINE|)
```

## Configure instance name

Use this attribute to create an IPv4 vrf static route with gateway in default vrf table.

Attribute Name: enable-global-table-lookup

Attribute Type: empty

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv4>
        <routes>
          <route>
            <gateway-address>A.B.C.D</gateway-address>
            <config>
              <gateway-address>A.B.C.D</gateway-address>
              <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            </config>
          </route>
        </routes>
      </ipv4>
    </static-routes>
  </vrf>
</network-instance>
</network-instances>

```

```

    </config>
    <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
  </interface-routes-global>
  <interface-route-global> <!-- operation="delete"-->
    </enable-global-table-lookup>
    <config>
      </enable-global-table-lookup>
      <interface-name>IFNAME</interface-name>
    </config>
    <interface-name>IFNAME</interface-name>
  </interface-route-global>
</interface-routes-global>
</route>
</routes>
</ipv4>
</static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) A.B.C.D IFNAME global
```

## Configure destination prefix

Use this attribute to track a object.

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv4>
        <routes>
          <route>
            <gateway-address>A.B.C.D</gateway-address>
            <config>
              <gateway-address>A.B.C.D</gateway-address>
              <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>

```

```

    </config>
    <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
  </interface-routes-global>
  <interface-route-global>
    </enable-global-table-lookup>
    <config>
      </enable-global-table-lookup><!-- operation="delete"-->
      <interface-name>IFNAME</interface-name>
    </config>
    <interface-name>IFNAME</interface-name>
    <track-id>1</track-id> <!-- operation="delete"-->
  </interface-route-global>
</interface-routes-global>
</route>
</routes>
</ipv4>
</static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) A.B.C.D IFNAME global track <1-500>
```

## Configure distance

Use this attribute to set description of the static route.

Attribute Name: description

Attribute Type: string

Attribute Name: distance

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-255

Attribute Name: tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>

```

```

<instance-name>NAME</instance-name>
<config>
  <instance-name>WORD</instance-name>
  <instance-type>vrf</instance-type>
</config>
  <instance-type>vrf</instance-type>
<vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
  <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
    <ipv4>
      <interface-routes>
        <interface-route>
          <interface-name>IFNAME</interface-name>
          <config>
            <interface-name>IFNAME</interface-name>
            <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
            <distance>1</distance> <!-- operation="delete"-->
            <tag>0</tag> <!-- operation="delete"-->
            <track-id>1</track-id> <!-- operation="delete"-->
          </config>
          <destination-prefix>A.B.C.D/M|A.B.C.D A.B.C.D</destination-prefix>
          <description>LINE</description> <!-- operation="delete"-->
        </interface-route>
      </interface-routes>
    </ipv4>
  </static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```

ip route vrf NAME (A.B.C.D/M|A.B.C.D A.B.C.D) IFNAME (<1-255>|) (tag <0-4294967295>|) (track <1-500>|) (description LINE|)

```

## Configure source prefix

Use this attribute to configure administrative distance for mroute.

Attribute Name: distance

Attribute Type: uint32

Attribute Range: 0-255

Attribute Name: gateway-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>

```

```

    <instance-name>WORD</instance-name>
    <instance-type>vrf</instance-type>
</config>
    <instance-type>vrf</instance-type>
<vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
    <ipv4>
    <multicast-routes>
    <multicast-route>
        <protocol-type>default</protocol-type>
        <config>
            <protocol-type>default</protocol-type>
            <source-prefix>A.B.C.D/M</source-prefix>
            <gateway-address>A.B.C.D</gateway-address>
        </config>
        <source-prefix>A.B.C.D/M</source-prefix>
        <distance>0</distance>
    </multicast-route>
    </multicast-routes>
    </ipv4>
    </static-routes>
    </vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ip mroute vrf NAME A.B.C.D/M ((static|rip|ospf|bgp|isis)|) A.B.C.D (<0-255>|)
```

## Configure destination prefix

Network Instance Type

Attribute Name: instance-type

Attribute Type: enum (vrf|mac-vrf|l2ni|vpls|vpws|evpn|cross-connect|bridge-domain)

Attribute Name: destination-prefix

Attribute Type: string

Attribute Name: interface-name

Attribute Type: string

Attribute Name: enable-ipv6-global-table-lookup

Attribute Type: empty

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
    <network-instance> <!-- operation="delete"-->
        <instance-type>vrf</instance-type>
        <config>
            <instance-type>vrf</instance-type>

```

```

    <instance-name>WORD</instance-name>
  </config>
  <instance-name>WORD</instance-name>
<static-routes>
<ipv6>
<interface-routes-global>
<interface-route-global>
  <destination-prefix>X:X::X:X/M</destination-prefix>
  <interface-name>IFNAME</interface-name>
  </enable-ipv6-global-table-lookup>
</interface-route-global>
</interface-routes-global>
</ipv6>
</static-routes>
</network-instance>
</network-instances>

```

## Command Syntax

```
ipv6 route vrf NAME X:X::X:X/M IFNAME global
```

## Configure enable ipv6 global table lookup

Use this attribute to track a object.

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
      <ipv6>
        <interface-routes-global>
          <interface-route-global>
            </enable-ipv6-global-table-lookup>
          </interface-route-global>
        </interface-routes-global>
      </static-routes>
    </vrf>
  </network-instance>
</network-instances>

```

```

        <destination-prefix>X:X::X:X/M</destination-prefix>
        <track-id>1</track-id> <!-- operation="delete"-->
    </interface-route-global>
</interface-routes-global>
</ipv6>
</static-routes>
</vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
ipv6 route vrf NAME X:X::X:X/M IFNAME global track <1-500>
```

## Configure gateway address

Network Instance Type

Attribute Name: instance-type

Attribute Type: enum (vrf|mac-vrf|l2ni|vpls|vpws|evpn|cross-connect|bridge-domain)

Attribute Name: destination-prefix

Attribute Type: string

Attribute Name: gateway-address

Attribute Type: inet:ipv6-address

Attribute Name: interface-name

Attribute Type: string

Attribute Name: enable-ipv6-global-table-lookup

Attribute Type: empty

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance> <!-- operation="delete"-->
    <instance-type>vrf</instance-type>
    <config>
      <instance-type>vrf</instance-type>
      <instance-name>WORD</instance-name>
    </config>
    <instance-name>WORD</instance-name>
  <static-routes>
  <ipv6>
    <gateway-interface-routes-global>
    <gateway-interface-route-global>
      <destination-prefix>X:X::X:X/M</destination-prefix>
      <gateway-address>X:X::X:X</gateway-address>
      <interface-name>IFNAME</interface-name>
      </enable-ipv6-global-table-lookup>
    </gateway-interface-route-global>

```



```

    </gateway-interface-routes-global>
  </ipv6>
</static-routes>
</network-instance>
</network-instances>

```

## Command Syntax

```
ipv6 route vrf NAME X:X::X:X/M X:X::X:X IFNAME global
```

---

## Configure gateway address

Use this attribute to track a object.

Attribute Name: track-id

Attribute Type: uint16

Attribute Range: 1-500

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
        <ipv6>
          <gateway-interface-routes-global>
            <gateway-interface-route-global>
              </enable-ipv6-global-table-lookup>
              <config>
                </enable-ipv6-global-table-lookup><!-- operation="delete"-->
                <interface-name>IFNAME</interface-name>
                <gateway-address>X:X::X:X</gateway-address>
                <destination-prefix>X:X::X:X/M</destination-prefix>
              </config>
              <interface-name>IFNAME</interface-name>
              <gateway-address>X:X::X:X</gateway-address>
              <destination-prefix>X:X::X:X/M</destination-prefix>
              <track-id>1</track-id> <!-- operation="delete"-->
            </gateway-interface-route-global>
          </gateway-interface-routes-global>
        </ipv6>
      </static-routes>
    </vrf>
  </network-instance>
</network-instances>

```

## Command Syntax

```
ipv6 route vrf NAME X:X::X:X/M X:X::X:X IFNAME global track <1-500>
```

## Configure protocol type

Use this attribute to configure administrative distance for mroute.

This command is supported when following feature are enabled ipv6 feature

Attribute Name: distance

Attribute Type: uint32

Attribute Range: 0-255

Attribute Name: gateway-mroute

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>NAME</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <static-routes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
        <ipv6>
          <multicast-routes>
            <multicast-route>
              <protocol-type>default</protocol-type>
              <config>
                <protocol-type>default</protocol-type>
                <source-prefix>X:X::X:X/M</source-prefix>
              </config>
              <source-prefix>X:X::X:X/M</source-prefix>
              <nexthop>
                <config>
                  <gateway-mroute>X:X::X:X</gateway-mroute>
                  <distance>0</distance>
                </config>
              </nexthop>
            </multicast-route>
          </multicast-routes>
        </ipv6>
      </static-routes>
    </vrf>
  </network-instance>
</network-instances>
```

---

## Command Syntax

```
ipv6 mroute vrf NAME X:X::X:X/M ((static|rip|ospf|bgp|isis)|) X:X::X:X (<0-255>|)
```

---

## clear ip route vrf NAME \*

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-ip-vrf-route-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
  <vrf-name>NAME</vrf-name>
</clear-ip-vrf-route-all>
```

## Command Syntax

```
clear ip route vrf NAME *
```

---

## clear ip route vrf NAME A.B.C.D/M

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: prefix-address

Attribute Type: string

### Netconf RPC payload

```
<clear-ip-vrf-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
  <vrf-name>NAME</vrf-name>
  <prefix-address>A.B.C.D/M</prefix-address>
</clear-ip-vrf-route>
```

## Command Syntax

```
clear ip route vrf NAME A.B.C.D/M
```

---

## clear ipv4 route vrf NAME \*

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv4-vrf-route-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
  <vrf-name>NAME</vrf-name>
</clear-ipv4-vrf-route-all>
```

## Command Syntax

```
clear ipv4 route vrf NAME *
```

---

## clear ipv4 route vrf NAME A.B.C.D/M

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: prefix-address

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv4-vrf-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
  <vrf-name>NAME</vrf-name>
  <prefix-address>A.B.C.D/M</prefix-address>
</clear-ipv4-vrf-route>
```

### Command Syntax

```
clear ipv4 route vrf NAME A.B.C.D/M
```

---

## clear ipv6 route vrf NAME \*

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv6-vrf-route-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-
vrf">
  <vrf-name>NAME</vrf-name>
</clear-ipv6-vrf-route-all>
```

### Command Syntax

```
clear ipv6 route vrf NAME *
```

---

## clear ipv6 route vrf NAME X:X::X:X/M

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: prefix-ipv6-address

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv6-vrf-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rib-vrf">
  <vrf-name>NAME</vrf-name>
  <prefix-ipv6-address>X:X::X:X/M</prefix-ipv6-address>
</clear-ipv6-vrf-route>
```

### Command Syntax

```
clear ipv6 route vrf NAME X:X::X:X/M
```

---

## IPI-OSPF

---

### Configure area interface config mode

Use this attribute to set the OSPF area interface mode operation. Enabling this makes OSPF compatible with OpenConfig datamodel.

Attribute Name: area-interface-config-mode

Attribute Type: empty

#### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <global>
    <config>
      </area-interface-config-mode><!-- operation="delete"-->
    </config>
  </global>
</ospfv2>
```

#### Command Syntax

```
ospf area-interface-config-mode
```

---

### Configure enable multi instance capability

Use this attribute to enable OSPF multiple instances capability.

Attribute Name: enable-multi-instance-capability

Attribute Type: empty

#### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <global>
    <config>
      </enable-multi-instance-capability><!-- operation="delete"-->
    </config>
  </global>
</ospfv2>
```

#### Command Syntax

```
enable ext-ospf-multi-inst
```

---

### Configure grace period

Use this attribute to set the grace period for restarting the router OSPF.

This command is supported when following feature are enabled Restart capability

Attribute Name: grace-period

Attribute Type: uint16

Default Value: 120

Attribute Range: 2-1800

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <global>
    <graceful-restart>
      <config>
        <grace-period>2</grace-period> <!-- operation="delete"-->
      </config>
    </graceful-restart>
  </global>
</ospfv2>
```

### Command Syntax

```
ospf restart grace-period <2-1800>
```

---

## Configure max grace period

Use this attribute to set the maximum grace period. Act as helper only if received grace-period is less than this value.

This command is supported when following feature are enabled Restart capability

Attribute Name: max-grace-period

Attribute Type: uint16

Attribute Range: 2-1800

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <global>
    <graceful-restart>
      <helper>
        <config>
          <max-grace-period>2</max-grace-period> <!-- operation="delete"-->
        </config>
      </helper>
    </graceful-restart>
  </global>
</ospfv2>
```

### Command Syntax

```
ospf restart helper max-grace-period <2-1800>
```

---

## Configure disable all neighbors

Use this attribute to prevent the router OSPF from acting as helper for any neighbor.

This command is supported when following feature are enabled Restart capability

Attribute Name: disable-all-neighbors

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <global>
    <graceful-restart>
    <helper>
    <config>
      </disable-all-neighbors><!-- operation="delete"-->
    </config>
  </helper>
</graceful-restart>
</global>
</ospfv2>
```

### Command Syntax

```
ospf restart helper never
```

---

## Configure disable neighbor

Use this attribute to set the neighbor router-id for which never act as helper.

This command is supported when following feature are enabled Restart capability

Attribute Name: disable-neighbor

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <global>
    <graceful-restart>
    <helper>
    <config>
      <disable-neighbor>A.B.C.D</disable-neighbor> <!-- operation="delete"-->
    </config>
  </helper>
</graceful-restart>
</global>
</ospfv2>
```

### Command Syntax

```
ospf restart helper never router-id A.B.C.D
```

---

## Configure ospf id

Use this attribute to set the OSPF process ID.

Attribute Name: ospf-id

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process> <!-- operation="delete"-->
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
        <vrf-name>WORD</vrf-name>
      </config>
    </process>
  </processes>
</ospfv2>
```

### Command Syntax

```
router ospf (<0-65535>|) (WORD|)
```

---

## Configure router id

Use this attribute to set a router ID for the OSPF process. Configure each router OSPF with an unique router ID.

Attribute Name: router-id

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
    </process>
  </processes>
</ospfv2>
```

### Command Syntax

```
router-id A.B.C.D
```

---

## Configure flood reduction

Use this attribute to enable flood reduction on all OSPF interfaces.

Attribute Name: flood-reduction

Attribute Type: empty



**Netconf edit-config payload**

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      </flood-reduction><!-- operation="delete"-->
    </process>
  </processes>
</ospfv2>
```

**Command Syntax**

```
ospf flood-reduction
```

---

**Configure rfc1583 compatibility**

Use this attribute to restore the method used to calculate summary route costs per RFC 1583.

Attribute Name: rfc1583-compatibility

Attribute Type: empty

**Netconf edit-config payload**

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      </rfc1583-compatibility><!-- operation="delete"-->
    </process>
  </processes>
</ospfv2>
```

**Command Syntax**

```
compatible rfc1583
```

---

**Configure database summary**

Use this attribute to enable the database summary list optimization.

Attribute Name: database-summary

Attribute Type: empty

**Netconf edit-config payload**

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
```

```

    <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
</database-summary><!-- operation="delete"-->
</process>
</processes>
</ospfv2>

```

### Command Syntax

```
enable db-summary-opt
```

---

## Configure bfd enable all interfaces

Use this attribute to enable Bidirectional Forwarding Detection (BFD) on all interfaces.

Attribute Name: bfd-enable-all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
        </config>
        </bfd-enable-all-interfaces><!-- operation="delete"-->
      </process>
    </processes>
  </ospfv2>

```

### Command Syntax

```
bfd all-interfaces
```

---

## Configure log adjacency changes

Use this attribute for the router to send a SYSLOG message when an OSPF neighbor goes up or down.

Attribute Name: log-adjacency-changes

Attribute Type: enum (brief|detail)

Default Value: brief

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>

```

```

    <ospf-id>0</ospf-id>
  </config>
  <log-adjacency-changes>brief</log-adjacency-changes> <!-- operation="delete"-->
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
log-adjacency-changes (brief|detail|)
```

---

## Configure shutdown

Use this attribute to shutdown OSPF process.

Attribute Name: shutdown

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      </shutdown><!-- operation="delete"-->
    </process>
  </processes>
</ospfv2>

```

## Command Syntax

```
shutdown
```

---

## Configure area border type

Use this attribute to set an OSPF Area Border Router (ABR) type.

Attribute Name: area-border-type

Attribute Type: enum (standard|cisco|ibm|shortcut)

Default Value: cisco

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
</ospfv2>

```

```

    <area-border-type>cisco</area-border-type> <!-- operation="delete"-->
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
ospf abr-type (standard|cisco|ibm|shortcut|)
```

---

## Configure reference bandwidth

Use this attribute to control how OSPF calculates the default metric for the interface.

Attribute Name: reference-bandwidth

Attribute Type: uint32

Default Value: 100

Attribute Range: 1-4294967

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>
        <ospf-id>0</ospf-id>
    </config>
    <reference-bandwidth>1</reference-bandwidth> <!-- operation="delete"-->
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
auto-cost reference-bandwidth <1-4294967>
```

---

## Configure max database descriptors

Use this attribute to limit the number of Database Descriptors (DD) that can be processed concurrently.

Attribute Name: max-database-descriptors

Attribute Type: uint16

Default Value: 64

Attribute Range: 1-65535

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>

```

```

        <ospf-id>0</ospf-id>
    </config>
    <max-database-descriptors>1</max-database-descriptors> <!-- operation="delete"-->
>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
max-concurrent-dd <1-65535>
```

---

## Configure p2p rfc incompatible

Use this attribute to enable unicast packet on point-point interface.

Attribute Name: p2p-rfc-incompatible

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
        </config>
        </p2p-rfc-incompatible><!-- operation="delete"-->
      </process>
    </processes>
  </ospfv2>

```

## Command Syntax

```
ospf point-point rfc-incompatible
```

---

## Configure context name

Use this attribute to set the SNMP context name for OSPF instance.

Attribute Name: context-name

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
        </config>
      </process>
    </processes>
  </ospfv2>

```

```

    <context-name>WORD</context-name> <!-- operation="delete"-->
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
snmp context-name WORD
```

---

## Configure passive interface all

Use this attribute to set all interfaces as passive.

Attribute Name: passive-interface-all

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>
        <ospf-id>0</ospf-id>
    </config>
<passive-interfaces>
<config>
    </passive-interface-all><!-- operation="delete"-->
</config>
</passive-interfaces>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
passive-interface
```

---

## Configure passive mode

Use this attribute to define the passive mode.

Attribute Name: passive-mode

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>
        <ospf-id>0</ospf-id>
    </config>

```

```

<passive-interfaces>
<passive-interface>
  <name>IFNAME</name>
  <config>
    <name>WORD</name>
  </config>
  <passive-mode>enable</passive-mode> <!-- operation="delete"-->
</passive-interface>
</passive-interfaces>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
passive-interface IFNAME (disable|enable)
```

---

## Configure address

Use this attribute to set interface address as passive.

Attribute Name: address

Attribute Type: inet:ipv4-address

Attribute Name: passive-mode

Attribute Type: enum (enable)

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
<passive-interfaces>
<passive-interface>
  <name>IFNAME</name>
  <config>
    <name>WORD</name>
  </config>
  <passive-addresses>
<passive-address> <!-- operation="delete"-->
  <address>A.B.C.D</address>
  <config>
    <address>A.B.C.D</address>
    <passive-mode>enable</passive-mode>
  </config>
</passive-address>
</passive-addresses>
</passive-interface>

```

```

</passive-interfaces>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
passive-interface IFNAME A.B.C.D (enable)
```

---

## Configure originate

Use this attribute to create a default external route into an OSPF routing domain. The system acts like an Autonomous System Boundary Router (ASBR) when you use the default-information originate command to redistribute routes into an OSPF routing domain. An ASBR does not by default generate a default route into the OSPF routing domain

Attribute Name: originate

Attribute Type: uint8

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <default-information>
    <config>
      </originate><!-- operation="delete"-->
    </config>
  </default-information>
</ospfv2>

```

## Command Syntax

```
default-information originate
```

---

## Configure route map

Use this attribute to set route-map instance.

Attribute Name: route-map

Attribute Type: string

Attribute Name: originate

Attribute Type: empty

Attribute Name: always-advertise-default-route

Attribute Type: empty

Attribute Name: metric



Attribute Type: uint32

Default Value: 10

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <default-information>
      <config>
        </originate><!-- operation="delete"-->
        </always-advertise-default-route><!-- operation="delete"-->
        <metric>0</metric> <!-- operation="delete"-->
        <metric-type>2</metric-type> <!-- operation="delete"-->
        <route-map>WORD</route-map> <!-- operation="delete"-->
      </config>
    </default-information>
  </process>
</processes>
</ospfv2>

```

### Command Syntax

```

default-information originate { always| metric <0-16777214>| metric-type (1|2)|
route-map WORD }

```

## Configure disable graceful restart

Graceful OSPF Restart.

Attribute Name: disable-graceful-restart

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <capability>

```

```

<config>
  </disable-graceful-restart><!-- operation="delete"-->
</config>
</capability>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
no capability restart graceful
```

---

## Configure disable opaque lsa

Use this attribute to enable opaque-LSAs which are Type 9, 10 and 11 LSAs.

Attribute Name: disable-opaque-lsa

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <capability>
    <config>
      </disable-opaque-lsa><!-- operation="delete"-->
    </config>
  </capability>
</ospfv2>

```

## Command Syntax

```
no capability opaque
```

---

## Configure enable vrf lite

Use this attribute to enable VRF-lite feature.

Attribute Name: enable-vrf-lite

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>

```

```

    <config>
      <ospf-id>0</ospf-id>
    </config>
  <capability>
    <config>
      </enable-vrf-lite><!-- operation="delete"-->
    </config>
  </capability>
</process>
</processes>
</ospfv2>

```

### Command Syntax

```
capability vrf-lite
```

---

## Configure link local signaling

Use this attribute to enable link-local signaling feature.

Attribute Name: link-local-signaling

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <capability>
      <config>
        </link-local-signaling><!-- operation="delete"-->
      </config>
    </capability>
  </process>
</processes>
</ospfv2>

```

### Command Syntax

```
capability lls
```

---

## Configure maximum areas number

Use this attribute to set the maximum number of OSPF areas (excluding Backbone Area).

Attribute Name: maximum-areas-number

Attribute Type: uint32

Attribute Range: 1-4294967294

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <config>
      <maximum-areas-number>1</maximum-areas-number> <!-- operation="delete"-->
    </config>
  </areas>
</ospfv2>

```

**Command Syntax**

```
maximum-area <1-4294967294>
```

---

**Configure disable advertise**

Use this attribute to disable the advertisement of these routes.

Attribute Name: disable-advertise

Attribute Type: empty

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
        <area-ranges>
          <area-range>
            <address>A.B.C.D/M|A.B.C.D A.B.C.D</address>
            <config>
              <address>A.B.C.D/M|A.B.C.D A.B.C.D</address>
            </config>
            </disable-advertise><!-- operation="delete"-->
          </area-range>
        </area-ranges>
      </config>
    </area>
  </areas>
</ospfv2>

```

```

</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area (A.B.C.D|<0-4294967295>) range (A.B.C.D/M|A.B.C.D A.B.C.D) not-advertise
```

---

## Configure authentication type

Use this attribute to set the area authentication type.

Attribute Name: authentication-type

Attribute Type: enum (authentication|authentication message-digest)

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
        <authentication-type>authentication</authentication-type> <!--
operation="delete"-->
      </config>
    </area>
  </areas>
</ospfv2>

```

## Command Syntax

```
area (authentication|authentication message-digest)
```

---

## Configure default cost

Use this attribute to set the summary-default cost of a NSSA or stub area.

Attribute Name: default-cost

Attribute Type: uint32

Attribute Range: 0-16777215

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
        <default-cost>0</default-cost> <!-- operation="delete"-->
      </config>
    </area>
  </areas>
</ospfv2>

```

**Command Syntax**

```
area default-cost <0-16777215>
```

---

**Configure shortcut**

Use this attribute to set the area shortcutting mode.

Attribute Name: shortcut

Attribute Type: enum (default|enable|disable)

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
        <shortcut>default</shortcut> <!-- operation="delete"-->
      </config>
    </area>
  </areas>
</ospfv2>

```

---

```
</ospfv2>
```

## Command Syntax

```
area shortcut (default|enable|disable)
```

---

## Configure name

Use this attribute to set the interface to enable OSPF area.

Attribute Name: name

Attribute Type: string

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface> <!-- operation="delete"-->
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>
```

## Command Syntax

```
area interface IFNAME
```

---

## Configure cost

Use this attribute to explicitly specify the cost of the link-state metric in a router-LSA.

Attribute Name: cost

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface>
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
          <cost>1</cost> <!-- operation="delete"-->
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>
```

### Command Syntax

```
area interface IFNAME cost <1-65535>
```

## Configure network type

Use this attribute to set the area interface network type.

Attribute Name: network-type

Attribute Type: enum (point-to-point|broadcast|non-broadcast|point-to-multipoint|point-to-multipoint non-broadcast)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
```



```

<area>
  <area-id>OSPF_AREA_T</area-id>
  <config>
    <area-id>OSPF_AREA_T</area-id>
  </config>
  <interfaces>
    <interface>
      <name>IFNAME</name>
      <config>
        <name>WORD</name>
      </config>
      <network-type>point-to-point</network-type> <!-- operation="delete"-->
    </interface>
  </interfaces>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```

area interface IFNAME network-type (point-to-point|broadcast|non-broadcast|point-
to-multipoint|point-to-multipoint non-broadcast)

```

## Configure passive

Use this attribute to set area interface as passive.

Attribute Name: passive

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface>
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>

```

```

        </config>
        </passive><!-- operation="delete"-->
    </interface>
</interfaces>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area interface IFNAME passive
```

---

## Configure priority

Use this attribute to set the router priority to determine the designated router (DR) for the network.

Attribute Name: priority

Attribute Type: uint8

Default Value: 1

Attribute Range: 0-255

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface>
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
          <priority>0</priority> <!-- operation="delete"-->
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>

```

```
</ospfv2>
```

## Command Syntax

```
area interface IFNAME priority <0-255>
```

---

## Configure area id

Use this attribute to configure authentication on this interface.

Attribute Name: authentication-type

Attribute Type: enum (null|simple|message-digest)

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface>
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
          <authentication-type>simple</authentication-type> <!--
operation="delete"-->
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>
```

## Command Syntax

```
area interface IFNAME authentication (null|message-digest|)
```

---

## Configure enabled

Use this attribute to enable Bidirectional Forwarding Detection (BFD).

This command is supported when following feature are enabled Bidirectional Forwarding Detection (BFD)

Attribute Name: enabled

Attribute Type: enum (enable|disable)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface>
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
          <enable-bfd>
            <config>
              <enabled>enable</enabled> <!-- operation="delete"-->
            </config>
          </enable-bfd>
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>
```

### Command Syntax

```
area interface IFNAME bfd (disable|)
```

## Configure filter out

Use this attribute to turn on the LSA database-filter for a particular interface. OSPF floods new LSAs over all interfaces in an area, except the interface on which the LSA arrives. This redundancy ensures robust flooding. However, too much redundancy can waste bandwidth and might lead to excessive link and CPU usage in certain topologies, resulting in destabilizing the network. To avoid this, use this attribute to block flooding of LSAs over specified interfaces.

Attribute Name: filter-out

Attribute Type: empty

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <interfaces>
        <interface>
          <name>IFNAME</name>
          <config>
            <name>WORD</name>
          </config>
          <lsa-filter>
            <config>
              </filter-out><!-- operation="delete"-->
            </config>
          </lsa-filter>
        </interface>
      </interfaces>
    </area>
  </areas>
</ospfv2>

```

**Command Syntax**

```
area interface IFNAME database-filter all out
```

**Configure dead interval**

Use this attribute to set the interval during which the router waits to receive an OSPF hello packet from the neighbor before declaring the neighbor down.

Attribute Name: dead-interval

Attribute Type: uint16

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>

```

```

    <config>
      <ospf-id>0</ospf-id>
    </config>
  </areas>
  <area>
    <area-id>OSPF_AREA_T</area-id>
    <config>
      <area-id>OSPF_AREA_T</area-id>
    </config>
    <interfaces>
    <interface>
      <name>IFNAME</name>
      <config>
        <name>WORD</name>
      </config>
      <timers>
      <config>
        <dead-interval>1</dead-interval> <!-- operation="delete"-->
      </config>
      </timers>
    </interface>
    </interfaces>
  </area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area interface IFNAME dead-interval <1-65535>
```

---

## Configure hello interval

Use this attribute to specify the interval between hello packets.

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
  <process>
    <ospf-id>0</ospf-id>
    <config>
      <ospf-id>0</ospf-id>
    </config>
  </process>
  </processes>
</ospfv2>

```

```

<area>
  <area-id>OSPF_AREA_T</area-id>
  <config>
    <area-id>OSPF_AREA_T</area-id>
  </config>
  <interfaces>
    <interface>
      <name>IFNAME</name>
      <config>
        <name>WORD</name>
      </config>
      <timers>
        <config>
          <hello-interval>1</hello-interval> <!-- operation="delete"-->
        </config>
      </timers>
    </interface>
  </interfaces>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

### Command Syntax

```
area interface IFNAME hello-interval <1-65535>
```

---

## Configure retransmission interval

Use this attribute to specify the time between link-state advertisement (LSA) retransmissions for adjacencies belonging to the interface.

Attribute Name: retransmission-interval

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-3600

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>

```

```

        <area-id>OSPF_AREA_T</area-id>
    </config>
    <interfaces>
    <interface>
        <name>IFNAME</name>
        <config>
            <name>WORD</name>
        </config>
        <timers>
        <config>
            <retransmission-interval>1</retransmission-interval> <!--
operation="delete"-->
        </config>
        </timers>
    </interface>
    </interfaces>
    </area>
    </areas>
    </process>
    </processes>
    </ospfv2>

```

## Command Syntax

```
area interface IFNAME retransmit-interval <1-3600>
```

---

## Configure no summary

Use this attribute to set the OSPF area stub with no-summary, this will prevent an ABR from sending summary link state advertisements into the stub area.

Attribute Name: no-summary

Attribute Type: empty

Attribute Name: is-stub

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
    <processes>
    <process>
        <ospf-id>0</ospf-id>
        <config>
            <ospf-id>0</ospf-id>
        </config>
    </process>
    </processes>
    <areas>
    <area>
        <area-id>OSPF_AREA_T</area-id>
        <config>
            <area-id>OSPF_AREA_T</area-id>
        </config>
        <stub>

```



```

    <config>
      </is-stub><!-- operation="delete"-->
      </no-summary><!-- operation="delete"-->
    </config>
  </stub>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area stub no-summary
```

---

## Configure is stub

Use this attribute to set the OSPF area as stub.

Attribute Name: is-stub

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
        </config>
      <areas>
        <area>
          <area-id>OSPF_AREA_T</area-id>
          <config>
            <area-id>OSPF_AREA_T</area-id>
            </config>
            <stub>
              <config>
                </is-stub><!-- operation="delete"-->
              </config>
            </stub>
          </area>
        </areas>
      </process>
    </processes>
  </ospfv2>

```

## Command Syntax

```
area stub
```

---

## Configure nssa enable

Use this attribute to enable the OSPF area as NSSA.

This command is supported when following feature are enabled Not-So-Stubby Area (NSSA)

Attribute Name: nssa-enable

Attribute Type: enum (nssa)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <nssas>
        <nssa> <!-- operation="delete"-->
          <nssa-enable>nssa</nssa-enable>
          <config>
            <nssa-enable>nssa</nssa-enable>
          </config>
        </nssa>
      </nssas>
    </area>
  </areas>
</ospfv2>
```

### Command Syntax

```
area (nssa)
```

---

## Configure stability interval

Use this attribute to set route-map instance.

This command is supported when following feature are enabled Not-So-Stubby Area (NSSA)

Attribute Name: route-map

Attribute Type: string

Attribute Name: no-summary

Attribute Type: empty

Attribute Name: stability-interval

Attribute Type: uint32

Default Value: 40

Attribute Range: 0-2147483647

Attribute Name: translator-role

Attribute Type: enum (never|always|candidate)

Attribute Name: no-redistribution

Attribute Type: empty

Attribute Name: default-information-originate

Attribute Type: empty

Attribute Name: metric

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <nssas>
        <nssa>
          <nssa-enable>nssa</nssa-enable>
          <config>
            <nssa-enable>nssa</nssa-enable>
            </no-summary>
            <stability-interval>0</stability-interval>
            <translator-role>never</translator-role>
            </no-redistribution>
            </default-information-originate>
            <metric>0</metric>
            <metric-type>2</metric-type>
          </config>
        </nssa>
      </nssas>
    </area>
  </areas>
</ospfv2>
```

```

    </config>
    <route-map>WORD</route-map>
  </nssa>
</nssas>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```

area (nssa) { no-summary| stability-interval <0-2147483647>| translator-role
  (never|always|candidate)| no-redistribution| default-information-originate|
  metric <0-16777214>| metric-type (1|2)| route-map WORD }

```

---

## Configure ip address

Use this attribute to set the OSPF area ID.

Attribute Name: area-id

Attribute Type: inet:ipv4-address

Attribute Name: ip-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area> <!-- operation="delete"-->
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <hosts>
        <host>
          <ip-address>A.B.C.D</ip-address>
        </host>
      </hosts>
    </area>
  </areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
host A.B.C.D area
```

---

## Configure instance id

Use this attribute to set the instance ID. Use this command with OSPF multiple-instance support enabled.

Attribute Name: instance-id

Attribute Type: uint8

Attribute Range: 0-255

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <networks>
        <network>
          <prefix>A.B.C.D/M|A.B.C.D A.B.C.D</prefix>
          <config>
            <prefix>A.B.C.D/M|A.B.C.D A.B.C.D</prefix>
          </config>
          <instance-id>0</instance-id>
        </network>
      </networks>
    </area>
  </areas>
</ospfv2>
```

## Command Syntax

```
network (A.B.C.D/M|A.B.C.D A.B.C.D) area (instance-id <0-255>|)
```

---

## Configure remote router id

Use this attribute to set the interface IP address of the neighbor.

Attribute Name: remote-router-id

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <virtual-links>
        <virtual-link <!-- operation="delete"-->
          <remote-router-id>A.B.C.D</remote-router-id>
          <config>
            <remote-router-id>A.B.C.D</remote-router-id>
          </config>
        </virtual-link>
      </virtual-links>
    </area>
  </areas>
</ospfv2>

```

**Command Syntax**

```
area virtual-link A.B.C.D
```

---

**Configure fall over**

Fall-over detection with Bidirectional Forwarding Detection (BFD).

Attribute Name: fall-over

Attribute Type: empty

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>

```

```

    <area-id>OSPF_AREA_T</area-id>
  </config>
</virtual-links>
<virtual-link>
  <remote-router-id>A.B.C.D</remote-router-id>
  <config>
    <remote-router-id>A.B.C.D</remote-router-id>
  </config>
  <bfd>
  <config>
    </fall-over><!-- operation="delete"-->
  </config>
</bfd>
</virtual-link>
</virtual-links>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area virtual-link A.B.C.D fall-over bfd
```

## Configure key

Use this attribute to set the authentication password (key).

Attribute Name: key

Attribute Type: string

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
  <process>
    <ospf-id>0</ospf-id>
    <config>
      <ospf-id>0</ospf-id>
    </config>
  </process>
  </processes>
  <areas>
  <area>
    <area-id>OSPF_AREA_T</area-id>
    <config>
      <area-id>OSPF_AREA_T</area-id>
    </config>
    <virtual-links>
    <virtual-link>
      <remote-router-id>A.B.C.D</remote-router-id>
      <config>
        <remote-router-id>A.B.C.D</remote-router-id>
      </config>
    </virtual-link>
  </virtual-links>
  </area>
  </areas>
</ospfv2>

```

```

    </config>
    <authentication>
    <config>
        <key>WORD</key> <!-- operation="delete"-->
    </config>
    </authentication>
</virtual-link>
</virtual-links>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area virtual-link A.B.C.D authentication-key WORD
```

---

## Configure message digest id

Use this attribute to set the authentication message digest key ID.

Attribute Name: message-digest-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: message-digest-encryption-type

Attribute Type: enum (md5)

Attribute Name: message-digest-key

Attribute Type: string

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>
        <ospf-id>0</ospf-id>
    </config>
</process>
</processes>
</ospfv2>

```



```

</config>
<authentication>
<message-digests>
<message-digest> <!-- operation="delete"-->
  <message-digest-id>1</message-digest-id>
  <config>
    <message-digest-id>1</message-digest-id>
    <message-digest-encryption-type>md5</message-digest-encryption-type>
    <message-digest-key>WORD</message-digest-key>
  </config>
</message-digest>
</message-digests>
</authentication>
</virtual-link>
</virtual-links>
</area>
</areas>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
area virtual-link A.B.C.D message-digest-key <1-255> (md5) WORD
```

---

## Configure transmit delay

Dead router detection time. Interval during which no packets are received and after which the router acknowledges a neighboring router as off-line.

Attribute Name: dead-interval

Attribute Type: uint16

Attribute Range: 1-65535

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

Attribute Name: transmit-delay

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-3600

Attribute Name: retransmission-interval

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-3600

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPF_AREA_T</area-id>
      <config>
        <area-id>OSPF_AREA_T</area-id>
      </config>
      <virtual-links>
        <virtual-link>
          <remote-router-id>A.B.C.D</remote-router-id>
          <config>
            <remote-router-id>A.B.C.D</remote-router-id>
          </config>
          <timers>
            <config>
              <hello-interval>1</hello-interval> <!-- operation="delete"-->
              <transmit-delay>1</transmit-delay> <!-- operation="delete"-->
              <retransmission-interval>1</retransmission-interval> <!--
operation="delete"-->
              <dead-interval>1</dead-interval> <!-- operation="delete"-->
            </config>
          </timers>
        </virtual-link>
      </virtual-links>
    </area>
  </areas>
</ospfv2>

```

**Command Syntax**

```

area virtual-link A.B.C.D { dead-interval <1-65535>| hello-interval <1-65535>|
  transmit-delay <1-3600>| retransmit-interval <1-3600> }

```

**Configure limit type**

Use this attribute to set the limit type. Soft limit: Warning message appears if the number of LSAs exceeds the specified value; Hard limit: Shutdown occurs if the number of LSAs exceeds the specified value. Default value is 2.

Attribute Name: limit-type

Attribute Type: enum (soft|hard)

Attribute Name: max-limit

Attribute Type: uint32

Attribute Range: 0-4294967294

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <lsdb>
    <overflow>
      <normal-lsa>
        <config>
          <max-limit>0</max-limit>
          <limit-type>hard</limit-type>
        </config>
      </normal-lsa>
    </overflow>
  </lsdb>
</ospfv2>
```

### Command Syntax

```
overflow database <0-4294967294> ((soft|hard|))
```

## Configure exit interval

Use this attribute to set the number of seconds the router waits before trying to exit the database overflow state. If this parameter is 0, the router exits the overflow state only after an explicit administrator command. Default value is 0.

This command is supported when following feature are enabled OSPF DataBase (DB) overflow

Attribute Name: exit-interval

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: max-limit

Attribute Type: uint32

Attribute Range: 0-2147483647

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
</ospfv2>
```

```

<lscdb>
<overflow>
<external-lsa>
<config>
    <max-limit>0</max-limit>
    <exit-interval>0</exit-interval>
</config>
</external-lsa>
</overflow>
</lscdb>
</process>
</processes>
</ospfv2>

```

### Command Syntax

```
overflow database external <0-2147483647> <0-65535>
```

---

## Configure keep all paths

Use this attribute to enable fast rerouting on all OSPF interfaces.

This command is supported when following feature are enabled OSPF Loop Free Alternate (LFA)

Attribute Name: keep-all-paths

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>
        <ospf-id>0</ospf-id>
    </config>
<lfa>
<fast-reroute>
<config>
    </keep-all-paths><!-- operation="delete"-->
</config>
</fast-reroute>
</lfa>
</process>
</processes>
</ospfv2>

```

### Command Syntax

```
fast-reroute keep-all-paths
```

---

## Configure idx

Use this attribute to set the tie breaking index. A lower value has higher preference.

This command is supported when following feature are enabled OSPF Loop Free Alternate (LFA)

Attribute Name: idx

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <lfa>
    <fast-reroute>
      <tie-breaks>
        <tie-break>
          <type>primary-path</type>
          <config>
            <type>primary-path</type>
          </config>
          <idx>1</idx> <!-- operation="delete"-->
        </tie-break>
      </tie-breaks>
    </fast-reroute>
  </lfa>
</ospfv2>
```

### Command Syntax

```
fast-reroute tie-break (primary-path|node-protecting|interface-disjoint|broadcast-
interface-disjoint|downstream-path|secondary-path) index <1-255>
```

---

## Configure default distance

Use this attribute to specifies a default administrative distance used when no other specification exists for a routing information source.

Attribute Name: default-distance

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
```

```

<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
<administrative-distance>
<config>
  <default-distance>1</default-distance> <!-- operation="delete"-->
</config>
</administrative-distance>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
distance <1-255>
```

---

## Configure intra area distance

Use this attribute to set the distance for all routes within an area.

Attribute Name: intra-area-distance

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: inter-area-distance

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: external-routes-distance

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
<administrative-distance>
<ospf>
<config>
  <inter-area-distance>1</inter-area-distance> <!-- operation="delete"-->
  <external-routes-distance>1</external-routes-distance> <!--
operation="delete"-->
  <intra-area-distance>1</intra-area-distance> <!-- operation="delete"-->
</config>

```

```

</ospf>
</administrative-distance>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
distance ospf { intra-area <1-255>| inter-area <1-255>| external <1-255> }
```

---

## Configure access control list

Use this attribute to specifies administrative distance network ACL.

Attribute Name: access-control-list

Attribute Type: string

Attribute Name: distance

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
        </config>
      <administrative-distance>
      <networks>
        <network>
          <prefix>A.B.C.D/M</prefix>
          <config>
            <prefix>A.B.C.D/M</prefix>
            <distance>1</distance>
          </config>
          <access-control-list>WORD</access-control-list>
        </network>
      </networks>
    </administrative-distance>
  </process>
</processes>
</ospfv2>

```

## Command Syntax

```
distance <1-255> A.B.C.D/M (WORD|)
```

---

## Configure not advertise

Use this attribute to suppress routes that match the address range.

Attribute Name: not-advertise

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <summary-addresses>
      <summary-address>
        <address>A.B.C.D/M|A.B.C.D A.B.C.D</address>
        <config>
          <address>A.B.C.D/M</address>
        </config>
        </not-advertise><!-- operation="delete"-->
      </summary-address>
    </summary-addresses>
  </process>
</processes>
</ospfv2>
```

### Command Syntax

```
summary-address (A.B.C.D/M|A.B.C.D A.B.C.D) not-advertise
```

---

## Configure tag

Use this attribute to set the tag value to use as a match value for controlling redistribution via route maps.

Attribute Name: tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <summary-addresses>
      <summary-address>
        <address>A.B.C.D/M|A.B.C.D A.B.C.D</address>
        <config>
          <address>A.B.C.D/M</address>
```



```

    </config>
    <tag>0</tag> <!-- operation="delete"-->
</summary-address>
</summary-addresses>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
summary-address (A.B.C.D/M|A.B.C.D A.B.C.D) tag <0-4294967295>
```

---

## Configure access control list isis

Use this attribute to set the access control list name for ISIS protocol.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: access-control-list-isis

Attribute Type: string

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
<distribute-list>
<filter-out>
<config>
  <access-control-list-isis>WORD</access-control-list-isis> <!--
operation="delete"-->
</config>
</filter-out>
</distribute-list>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
distribute-list WORD out isis
```

---

## Configure access control list bgp

Use this attribute to set the access control list name for BGP protocol.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: access-control-list-bgp

Attribute Type: string

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      <distribute-list>
      <filter-out>
      <config>
        <access-control-list-bgp>WORD</access-control-list-bgp> <!--
operation="delete"-->
      </config>
      </filter-out>
      </distribute-list>
    </process>
  </processes>
</ospfv2>

```

**Command Syntax**

```
distribute-list WORD out bgp
```

---

**Configure access control list rip**

Use this attribute to set the access control list name for RIP protocol.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: access-control-list-rip

Attribute Type: string

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      <distribute-list>
      <filter-out>
      <config>
        <access-control-list-rip>WORD</access-control-list-rip> <!--
operation="delete"-->
      </config>
      </filter-out>
      </distribute-list>
    </process>
  </processes>
</ospfv2>

```

## Command Syntax

```
distributed-list WORD out rip
```

---

## Configure access control list static

Use this attribute to set the access control list name for static routes.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: access-control-list-static

Attribute Type: string

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
      <distributed-list>
        <filter-out>
          <config>
            <access-control-list-static>WORD</access-control-list-static> <!--
operation="delete"-->
          </config>
        </filter-out>
      </distributed-list>
    </process>
  </processes>
</ospfv2>
```

## Command Syntax

```
distributed-list WORD out static
```

---

## Configure access control list connected

Use this attribute to set the access control list name for connected networks.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: access-control-list-connected

Attribute Type: string

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
```

```

    </config>
  <distributed-list>
    <filter-out>
      <config>
        <access-control-list-connected>WORD</access-control-list-connected> <!--
operation="delete"-->
      </config>
    </filter-out>
  </distributed-list>
</process>
</processes>
</ospfv2>

```

### Command Syntax

```
distributed-list WORD out connected
```

---

## Configure access control list kernel

Use this attribute to set the access control list name for KERNEL routes.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: access-control-list-kernel

Attribute Type: string

### Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <distributed-list>
      <filter-out>
        <config>
          <access-control-list-kernel>WORD</access-control-list-kernel> <!--
operation="delete"-->
        </config>
      </filter-out>
    </distributed-list>
  </process>
</processes>
</ospfv2>

```

### Command Syntax

```
distributed-list WORD out kernel
```

---

## Configure ospf process id

Use this attribute to set the OSPF ID in distribution list filter out.

This command is supported when following feature are enabled Access-Control List (ACL)

Attribute Name: ospf-process-id

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: access-control-list-out-ospf

Attribute Type: string

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <distributed-list>
      <filter-out>
        <ospfv2-processes>
          <ospfv2-process>
            <ospf-process-id>0</ospf-process-id>
            <config>
              <ospf-process-id>0</ospf-process-id>
              <access-control-list-out-ospf>WORD</access-control-list-out-ospf> <!--
operation="delete"-->
            </config>
          </ospfv2-process>
        </ospfv2-processes>
      </filter-out>
    </distributed-list>
  </process>
</processes>
</ospfv2>
```

### Command Syntax

```
distribute-list WORD out ospf (<0-65535>|)
```

---

## Configure primary domain id address

Use this attribute to set the domain ID in IPv4 address format.

This command is supported when following feature are enabled OSPF Virtual Routing and Forwarding (VRF)

Attribute Name: primary-domain-id-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
```

```

    <ospf-id>0</ospf-id>
  </config>
  <ospf-id>0</ospf-id>
</config>
<domain-id>
  <primary-domain>
    <config>
      <primary-domain-id-address>A.B.C.D</primary-domain-id-address> <!--
operation="delete"-->
    </config>
  </primary-domain>
</domain-id>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
domain-id A.B.C.D
```

---

## Configure primary domain id hex

Use this attribute to set domain ID in hexadecimal.

This command is supported when following feature are enabled OSPF Virtual Routing and Forwarding (VRF)

Attribute Name: primary-domain-id-hex

Attribute Type: string

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <domain-id>
      <primary-domain>
        <hexes>
          <hex> <!-- operation="delete"-->
            <primary-domain-id-hex>HEX_DATA</primary-domain-id-hex>
          </config>
            <primary-domain-id-hex>OSPF_DOMAIN_ID_HEX_STRING_T</primary-domain-id-hex>
            <primary-hex-type>type-as</primary-hex-type>
          </config>
            <primary-hex-type>type-as</primary-hex-type>
          </hex>
        </hexes>
      </primary-domain>
    </domain-id>
  </process>

```

```
</processes>
</ospfv2>
```

## Command Syntax

```
domain-id type (type-as|type-as4|type-back-comp|type-ip) value HEX_DATA
```

---

## Configure secondary domain id address

Use this attribute to set the secondary domain ID in IPv4 address format.

This command is supported when following feature are enabled OSPF Virtual Routing and Forwarding (VRF)

Attribute Name: secondary-domain-id-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <domain-id>
      <secondary-domain>
        <addresses>
          <address> <!-- operation="delete"-->
            <secondary-domain-id-address>A.B.C.D</secondary-domain-id-address>
          <config>
            <secondary-domain-id-address>A.B.C.D</secondary-domain-id-address>
          </config>
        </address>
      </addresses>
    </secondary-domain>
  </domain-id>
</process>
</processes>
</ospfv2>
```

## Command Syntax

```
domain-id A.B.C.D secondary
```

---

## Configure secondary domain id hex

Use this attribute to set secondary domain ID in hexadecimal.

This command is supported when following feature are enabled OSPF Virtual Routing and Forwarding (VRF)

Attribute Name: secondary-domain-id-hex

Attribute Type: string

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <domain-id>
    <secondary-domain>
    <hexes>
    <hex> <!-- operation="delete"-->
      <secondary-domain-id-hex>HEX_DATA</secondary-domain-id-hex>
    <config>
      <secondary-domain-id-hex>OSPF_DOMAIN_ID_HEX_STRING_T</secondary-domain-id-
hex>
      <secondary-hex-type>type-as</secondary-hex-type>
    </config>
    <secondary-hex-type>type-as</secondary-hex-type>
  </hex>
</hexes>
</secondary-domain>
</domain-id>
</process>
</processes>
</ospfv2>

```

**Command Syntax**

```
domain-id type (type-as|type-as4|type-back-comp|type-ip) value HEX_DATA secondary
```

**Configure poll interval**

Use this attribute to set the router cost for point-to-multipoint neighbor.

Attribute Name: cost

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

Attribute Name: priority

Attribute Type: uint8

Default Value: 0

Attribute Range: 0-255

Attribute Name: poll-interval

Attribute Type: uint32

Default Value: 120

Attribute Range: 1-2147483647



**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
<neighbors>
<neighbor>
  <address>A.B.C.D</address>
  <config>
    <address>A.B.C.D</address>
    <priority>0</priority> <!-- operation="delete"-->
    <poll-interval>1</poll-interval> <!-- operation="delete"-->
  </config>
  <cost>1</cost> <!-- operation="delete"-->
</neighbor>
</neighbors>
</process>
</processes>
</ospfv2>

```

**Command Syntax**

```
neighbor A.B.C.D { cost <1-65535>| priority <0-255>| poll-interval <1-2147483647> }
```

**Configure termination hold interval**

Use this attribute to set the LFA termination hold on interval. It represents the delay of primary route installation (to avoid micro loop) after a failover.

Attribute Name: termination-hold-interval

Attribute Type: uint32

Default Value: 6000

Attribute Range: 100-100000

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
<timers>
<lfa>
<config>
  <termination-hold-interval>100</termination-hold-interval> <!--
operation="delete"-->

```

```

</config>
</lfa>
</timers>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
fast-reroute terminate-hold-on interval <100-100000>
```

---

## Configure min arrival interval

Use this attribute to set the minimum interval to accept the same link-state advertisement (LSA) from OSPF neighbors.

Attribute Name: min-arrival-interval

Attribute Type: uint32

Default Value: 1000

Attribute Range: 0-600000

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <lsa>
    <config>
      <min-arrival-interval>0</min-arrival-interval> <!-- operation="delete"-->
    </config>
  </lsa>
</ospfv2>

```

## Command Syntax

```
timers lsa arrival <0-600000>
```

---

## Configure max delay

Use this attribute to set the maximum wait time in milliseconds between generation of the same LSA.

Attribute Name: max-delay

Attribute Type: uint32

Attribute Range: 1-600000

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <timers>
    <lsa>
      <delays>
        <delay> <!-- operation="delete"-->
          <max-delay>1</max-delay>
          <config>
            <max-delay>1</max-delay>
            <min-delay>1</min-delay>
            <start-delay>0</start-delay>
          </config>
          <min-delay>1</min-delay>
          <start-delay>0</start-delay>
        </delay>
      </delays>
    </lsa>
  </timers>
</process>
</processes>
</ospfv2>

```

**Command Syntax**

```
timers throttle lsa all <0-600000> <1-600000> <1-600000>
```

**Configure min delay**

Use this attribute to set the maximum delay between receiving a change to SPF calculation.

Attribute Name: max-delay

Attribute Type: uint32

Attribute Range: 0-2147483647

Attribute Name: min-delay

Attribute Type: uint32

Attribute Range: 0-2147483647

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>

```

```

        <ospf-id>0</ospf-id>
    </config>
</timers>
<spf>
<delay>
<config>
    <min-delay>0</min-delay>
    <max-delay>0</max-delay>
</config>
</delay>
</spf>
</timers>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
timers spf exp <0-2147483647> <0-2147483647>
```

---

## Configure default metric

Use this attribute to set a default metric for OSPF. A default metric facilitates redistributing routes with incompatible metrics. If the metrics do not convert, the default metric provides an alternative. Use this attribute to use the same metric value for all redistributed routes. Use this attribute in conjunction with the redistribute command.

Attribute Name: default-metric

Attribute Type: uint32

Default Value: 2

Attribute Range: 1-16777214

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
    <ospf-id>0</ospf-id>
    <config>
        <ospf-id>0</ospf-id>
    </config>
<redistribute>
<config>
    <default-metric>1</default-metric> <!-- operation="delete"-->
</config>
</redistribute>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
default-metric <1-16777214>
```

---

## Configure protocol

This attribute redistributes routes from a routing protocol, static route, or kernel route into an OSPF routing table.

Attribute Name: protocol

Attribute Type: enum (kernel|connected|static|rip|ospf|bgp|isis)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <redistribute>
    <routing-protocols>
      <routing-protocol> <!-- operation="delete"-->
        <protocol>kernel</protocol>
        <config>
          <protocol>kernel</protocol>
        </config>
      </routing-protocol>
    </routing-protocols>
  </redistribute>
</ospfv2>
```

### Command Syntax

```
redistribute (kernel|connected|static|rip|ospf|bgp|isis)
```

---

## Configure metric

Use this attribute to set metric value.

Attribute Name: metric

Attribute Type: uint32

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Attribute Name: route-map

Attribute Type: string

Attribute Name: tag

Attribute Type: uint32

Attribute Range: 0-4294967295

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    </process>
  </processes>
  <redistribute>
    <routing-protocols>
      <routing-protocol>
        <protocol>kernel</protocol>
        <config>
          <protocol>kernel</protocol>
          <metric-type>1</metric-type> <!-- operation="delete"-->
          <route-map>WORD</route-map> <!-- operation="delete"-->
          <tag>0</tag> <!-- operation="delete"-->
        </config>
      </routing-protocol>
    </routing-protocols>
  </redistribute>
</ospfv2>

```

**Command Syntax**

```

redistribute (kernel|connected|static|rip|ospf|bgp|isis) { metric <0-16777214>|
  metric-type (1|2)| route-map WORD| tag <0-4294967295> }

```

**Configure metric type**

Use this attribute to set metric value.

Attribute Name: metric

Attribute Type: uint32

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Attribute Name: route-map

Attribute Type: string

Attribute Name: tag

Attribute Type: uint32

Attribute Range: 0-4294967295

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">

```

```

<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
</redistribute>
<ospf-processes>
<ospf-process>
  <ospf-process-id>0</ospf-process-id>
  <config>
    <ospf-process-id>0</ospf-process-id>
    <metric-type>1</metric-type> <!-- operation="delete"-->
    <route-map>WORD</route-map> <!-- operation="delete"-->
    <tag>0</tag> <!-- operation="delete"-->
  </config>
  <metric>0</metric> <!-- operation="delete"-->
</ospf-process>
</ospf-processes>
</redistribute>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```

redistribute ospf <0-65535> { metric <0-16777214>| metric-type (1|2)| route-map
WORD| tag <0-4294967295> }

```

---

## Configure isis process id

This attribute redistributes routes from an instance of IS-IS into an OSPF routing table.

Attribute Name: isis-process-id

Attribute Type: string

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<processes>
<process>
  <ospf-id>0</ospf-id>
  <config>
    <ospf-id>0</ospf-id>
  </config>
</redistribute>
<isis-processes>
<isis-process> <!-- operation="delete"-->
  <isis-process-id>WORD</isis-process-id>
  <config>
    <isis-process-id>WORD</isis-process-id>
  </config>

```

```

</isis-process>
</isis-processes>
</redistribute>
</process>
</processes>
</ospfv2>

```

## Command Syntax

```
redistribute isis WORD
```

---

## Configure include stub

Use this attribute to set the metric of a stub link in the router LSA to the default max metric.

This command is supported when following feature are enabled Generate lsa with max-metric

Attribute Name: include-stub

Attribute Type: empty

Attribute Name: enable-max-router-lsa

Attribute Type: empty

Attribute Name: max-external-lsa

Attribute Type: uint32

Attribute Range: 1-16777215

Attribute Name: max-summary-lsa

Attribute Type: uint32

Attribute Range: 1-16777215

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <max-metric>
      <config>
        </enable-max-router-lsa>
        <max-external-lsa>1</max-external-lsa>
        <max-summary-lsa>1</max-summary-lsa>
        </include-stub>
      </config>
    </max-metric>
  </process>
</processes>
</ospfv2>

```



## Command Syntax

```
max-metric router-lsa { external-lsa (<1-16777215>|)| summary-lsa (<1-16777215>|)|
  include-stub }
```

---

## Configure enable max router lsa

Use this attribute to set the metric in the router LSA to the default max metric.

This command is supported when following feature are enabled Generate lsa with max-metric

Attribute Name: enable-max-router-lsa

Attribute Type: empty

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <max-metric>
      <config>
        </enable-max-router-lsa>
      </config>
    </max-metric>
  </process>
</processes>
</ospfv2>
```

## Command Syntax

```
max-metric router-lsa
```

---

## Configure on startup include stub

Use this attribute to set the metric of a stub link in the router LSA to the default max metric.

This command is supported when following feature are enabled Generate lsa with max-metric

Attribute Name: on-startup-include-stub

Attribute Type: empty

Attribute Name: max-on-startup

Attribute Type: uint32

Attribute Range: 5-86400

Attribute Name: max-on-startup-external-lsa

Attribute Type: uint32

Attribute Range: 1-16777215

Attribute Name: max-on-startup-summary-lsa

Attribute Type: uint32

Attribute Range: 1-16777215

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <max-metric-on-startup>
      <config>
        <max-on-startup>5</max-on-startup>
        <max-on-startup-external-lsa>1</max-on-startup-external-lsa>
        <max-on-startup-summary-lsa>1</max-on-startup-summary-lsa>
        </on-startup-include-stub>
      </config>
    </max-metric-on-startup>
  </process>
</processes>
</ospfv2>
```

### Command Syntax

```
max-metric router-lsa on-startup <5-86400> { external-lsa (<1-16777215>|)| summary-
  lsa (<1-16777215>|)| include-stub }
```

## Configure max on startup

Use this attribute to set the metric for router LSA on-startup for the transit link to the default max metric.

This command is supported when following feature are enabled Generate lsa with max-metric

Attribute Name: max-on-startup

Attribute Type: uint32

Attribute Range: 5-86400

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <processes>
    <process>
      <ospf-id>0</ospf-id>
      <config>
        <ospf-id>0</ospf-id>
      </config>
    <max-metric-on-startup>
      <config>
        <max-on-startup>5</max-on-startup>
      </config>
    </max-metric-on-startup>
```

```

</process>
</processes>
</ospfv2>

```

## Command Syntax

```
max-metric router-lsa on-startup <5-86400>
```

---

## Configure neighbor

Use this attribute to set the OSPF area ID in which to enable multi-area adjacency.

This command is supported when following feature are enabled HAVE\_OSPF\_MULTI\_AREA

Attribute Name: area-id

Attribute Type: union

Attribute Name: neighbor

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <multi-area-interfaces>
    <multi-area-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </multi-area-interface>
  </multi-area-interfaces>
  <ospfv2-processes>
    <ospfv2-process>
      <ospf-process-id>0</ospf-process-id>
      <config>
        <ospf-process-id>0</ospf-process-id>
      </config>
      <multi-areas-neighbors>
        <multi-area-neighbor> <!-- operation="delete"-->
          <area-id>OSPF_AREA_T</area-id>
          <config>
            <area-id>OSPF_AREA_T</area-id>
            <neighbor>A.B.C.D</neighbor>
          </config>
        </multi-area-neighbor>
      </multi-areas-neighbors>
    </ospfv2-process>
  </ospfv2-processes>
</multi-area-interface>
</multi-area-interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf <0-65535> multi-area (A.B.C.D|<0-4294967295>) neighbor A.B.C.D
```

---

## Configure rate limit

Use this attribute to enable OSPF Database Timers Rate Limiting Values for LSA Throttling debug.

Attribute Name: rate-limit

Attribute Type: uint8

Attribute Name: bfd

Attribute Type: empty

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install|spf-terse)

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

Attribute Name: events

Attribute Type: bits (abr|nssa|asbr|vlink|lsa|os|router)

Attribute Name: retransmission

Attribute Type: empty

Attribute Name: policy

Attribute Type: empty

Attribute Name: redistribute

Attribute Type: bits (detail|terse)

Attribute Name: graceful-restart

Attribute Type: bits (detail|terse)

Attribute Name: packet-hello

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-dd

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-request

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-update

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<debug>
<config>
  </bfd><!-- operation="delete"-->
  <route>spf</route> <!-- operation="delete"-->
  <rib>interface</rib> <!-- operation="delete"-->
  <nsm>interface</nsm> <!-- operation="delete"-->
  <n fsm>status</n fsm> <!-- operation="delete"-->
  <l sa>generate</l sa> <!-- operation="delete"-->
  <i fsm>status</i fsm> <!-- operation="delete"-->
  <events>abr</events> <!-- operation="delete"-->
  </retransmission><!-- operation="delete"-->
  </policy><!-- operation="delete"-->
  <redistribute>detail</redistribute> <!-- operation="delete"-->
  <graceful-restart>detail</graceful-restart> <!-- operation="delete"-->
  <packet-hello>send</packet-hello> <!-- operation="delete"-->
  <packet-dd>send</packet-dd> <!-- operation="delete"-->
  <packet-ls-request>send</packet-ls-request> <!-- operation="delete"-->
  <packet-ls-update>send</packet-ls-update> <!-- operation="delete"-->
  <packet-ls-ack>send</packet-ls-ack> <!-- operation="delete"-->
  </rate-limit><!-- operation="delete"-->
</config>
</debug>
</ospfv2>
```

### Command Syntax

```
debug ospf
```

## Configure bfd

Use this attribute to enable OSPF Database Timers Rate Limiting Values for LSA Throttling debug.

Attribute Name: rate-limit

Attribute Type: uint8

Attribute Name: bfd

Attribute Type: empty

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install|spf-terse)

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

Attribute Name: n fsm

Attribute Type: bits (status|events|timers)

Attribute Name: l sa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

Attribute Name: i fsm

Attribute Type: bits (status|events|timers)

Attribute Name: e vents

Attribute Type: bits (abr|nssa|asbr|vlink|lsa|os|router)

Attribute Name: retransmission

Attribute Type: empty

Attribute Name: p olicy

Attribute Type: empty

Attribute Name: redistribute

Attribute Type: bits (detail|terse)

Attribute Name: graceful-restart

Attribute Type: bits (detail|terse)

Attribute Name: packet-hello

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-dd

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-request

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-update

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<debug>
<config>
  </bfd><!-- operation="delete"-->
  <route>spf</route> <!-- operation="delete"-->
  <rib>interface</rib> <!-- operation="delete"-->
  <nsm>interface</nsm> <!-- operation="delete"-->
  <n fsm>status</n fsm> <!-- operation="delete"-->
  <l sa>generate</l sa> <!-- operation="delete"-->
  <i fsm>status</i fsm> <!-- operation="delete"-->
  <events>abr</events> <!-- operation="delete"-->
  </retransmission><!-- operation="delete"-->
  </policy><!-- operation="delete"-->
```

```

    <redistribute>detail</redistribute> <!-- operation="delete"-->
    <graceful-restart>detail</graceful-restart> <!-- operation="delete"-->
    <packet-hello>send</packet-hello> <!-- operation="delete"-->
    <packet-dd>send</packet-dd> <!-- operation="delete"-->
    <packet-ls-request>send</packet-ls-request> <!-- operation="delete"-->
    <packet-ls-update>send</packet-ls-update> <!-- operation="delete"-->
    <packet-ls-ack>send</packet-ls-ack> <!-- operation="delete"-->
    </rate-limit><!-- operation="delete"-->
</config>
</debug>
</ospfv2>

```

## Command Syntax

```
debug ospf all
```

---

## Configure retransmission

Use this attribute to enable OSPF Debug retransmission information debug.

Attribute Name: retransmission

Attribute Type: uint8

Attribute Name: policy

Attribute Type: empty

Attribute Name: redistribute

Attribute Type: bits (detail|terse)

Attribute Name: graceful-restart

Attribute Type: bits (detail|terse)

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<debug>
<config>
    </policy><!-- operation="delete"-->
    <redistribute>detail</redistribute> <!-- operation="delete"-->
    <graceful-restart>detail</graceful-restart> <!-- operation="delete"-->
    </retransmission><!-- operation="delete"-->
</config>
</debug>
</ospfv2>

```

## Command Syntax

```
debug ip ospf all
```

---

## Configure route

Use this attribute to enable OSPF route information debug.

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install|spf-terse)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <route>spf</route> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

### Command Syntax

```
debug ospf route ({spf|ia|ase|install|spf-terse}|)
```

---

## Configure rib

Use this attribute to enable OSPF RIB information debug.

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <rib>interface</rib> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

### Command Syntax

```
debug ospf rib ({interface|redistribute}|)
```

---

## Configure nsm

Use this attribute to enable OSPF NSM information debug.

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <nsm>interface</nsm> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```



---

## Command Syntax

```
debug ospf nsm ({interface|redistribute}|)
```

---

## Configure nfsm

Use this attribute to enable OSPF Neighbor State Machine debug.

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <nfsm>status</nfsm> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

## Command Syntax

```
debug ospf nfsm ({status|events|timers}|)
```

---

## Configure lsa

Use this attribute to enable OSPF Link State Advertisement debug.

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <lsa>generate</lsa> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

## Command Syntax

```
debug ospf lsa ({generate|flooding|install|refresh|maxage}|)
```

---

## Configure ifsm

Use this attribute to enable OSPF Interface State Machine debug.

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
  <config>
    <ifsm>status</ifsm> <!-- operation="delete"-->
  </config>
</debug>
</ospfv2>
```

### Command Syntax

```
debug ospf ifsm ({status|events|timers|})
```

---

## Configure events

Use this attribute to enable OSPF events information debug.

Attribute Name: events

Attribute Type: bits (abr|nssa|asbr|vlink|lsa|os|router)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
  <config>
    <events>abr</events> <!-- operation="delete"-->
  </config>
</debug>
</ospfv2>
```

### Command Syntax

```
debug ospf events ({abr|nssa|asbr|vlink|lsa|os|router|})
```

---

## Configure lfa

Use this attribute to enable OSPF LFA route install details debug.

Attribute Name: lfa

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
  <config>
    </lfa><!-- operation="delete"-->
  </config>
</debug>
</ospfv2>
```

### Command Syntax

```
debug ip ospf lfa
```

---

## Configure policy

Use this attribute to enable OSPF policy information debug.

Attribute Name: policy

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      </policy><!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

### Command Syntax

```
debug ip ospf policy
```

---

## Configure redistribute

Use this attribute to enable OSPF redistribute information debug.

Attribute Name: redistribute

Attribute Type: bits (detail|terse)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <redistribute>detail</redistribute> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

### Command Syntax

```
debug ip ospf redistribute ({detail|terse})
```

---

## Configure graceful restart

Use this attribute to enable OSPF graceful-restart debug.

Attribute Name: graceful-restart

Attribute Type: bits (detail|terse)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <graceful-restart>detail</graceful-restart> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

```
</config>
</debug>
</ospfv2>
```

## Command Syntax

```
debug ip ospf graceful-restart ({detail|terse|})
```

---

## Configure packet hello

OSPF Hello

Attribute Name: packet-hello

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <packet-hello>send</packet-hello> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

## Command Syntax

```
debug ospf packet hello ({send|recv|detail|})
```

---

## Configure packet dd

OSPF Database Description

Attribute Name: packet-dd

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <packet-dd>send</packet-dd> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

## Command Syntax

```
debug ospf packet dd ({send|recv|detail|})
```

---

## Configure packet ls request

OSPF Link State Request

Attribute Name: packet-ls-request

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <packet-ls-request>send</packet-ls-request> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

### Command Syntax

```
debug ospf packet ls-request ({send|recv|detail}||)
```

---

## Configure packet ls update

OSPF Link State Update

Attribute Name: packet-ls-update

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <packet-ls-update>send</packet-ls-update> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

### Command Syntax

```
debug ospf packet ls-update ({send|recv|detail}||)
```

---

## Configure packet ls ack

OSPF Link State Acknowledgment

Attribute Name: packet-ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <debug>
    <config>
      <packet-ls-ack>send</packet-ls-ack> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv2>
```

---

## Command Syntax

```
debug ospf packet ls-ack ({send|recv|detail|})
```

---

## clear ip ospf <0-65535> process

Attribute Name: process-id

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf RPC payload

```
<ospfv2-clear-process xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <process-id>0</process-id>
</ospfv2-clear-process>
```

## Command Syntax

```
clear ip ospf <0-65535> process
```

---

## clear ip ospf process

### Netconf RPC payload

```
<ospfv2-clear-process-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

## Command Syntax

```
clear ip ospf process
```

---

## restart ip ospf graceful (grace-period <2-1800>|)

Attribute Name: grace-period

Attribute Type: uint16

Attribute Range: 2-1800

### Netconf RPC payload

```
<ospfv2-restart-graceful xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <grace-period>2</grace-period>
</ospfv2-restart-graceful>
```

## Command Syntax

```
restart ip ospf graceful (grace-period <2-1800>|)
```

---

## snmp restart ospf

### Netconf RPC payload

```
<ospfv2-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

## Command Syntax

```
snmp restart ospf
```

---

## debug ospf all

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-ospf-all-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
debug ospf all
```

---

## no debug ospf all

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-ospf-all-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
no debug ospf all
```

---

## debug ospf bfd

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-bfd-on xmlns="http://www.ipinfusion.com/  
yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
debug ospf bfd
```

---

## no debug ospf bfd

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-bfd-off xmlns="http://www.ipinfusion.com/  
yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
no debug ospf bfd
```

---

## debug ospf database-timer rate-limit

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-rate-limit-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

---

**Command Syntax**

```
debug ospf database-timer rate-limit
```

---

**no debug ospf database-timer rate-limit****Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-rate-limit-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

**Command Syntax**

```
no debug ospf database-timer rate-limit
```

---

**debug ospf route ({spf|ia|ase|install|spf-terse}|)**

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install|spf-terse)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-route-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <route>spf</route>
</ipi-ospf-debug_ospfv2-terminal-debug-route-on>
```

**Command Syntax**

```
debug ospf route ({spf|ia|ase|install|spf-terse}|)
```

---

**no debug ospf route ({spf|ia|ase|install|spf-terse}|)**

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install|spf-terse)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-route-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <route>spf</route>
</ipi-ospf-debug_ospfv2-terminal-debug-route-off>
```

**Command Syntax**

```
no debug ospf route ({spf|ia|ase|install|spf-terse}|)
```

---

**debug ospf rib ({interface|redistribute}|)**

Attribute Name: rib

Attribute Type: bits (interface|redistribute)



---

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-rib-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <rib>interface</rib>
</ipi-ospf-debug_ospfv2-terminal-debug-rib-on>
```

**Command Syntax**

```
debug ospf rib ({interface|redistribute}|)
```

---

**no debug ospf rib ({interface|redistribute}|)**

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-rib-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <rib>interface</rib>
</ipi-ospf-debug_ospfv2-terminal-debug-rib-off>
```

**Command Syntax**

```
no debug ospf rib ({interface|redistribute}|)
```

---

**debug ospf packet ({send|recv|detail}|)**

Attribute Name: all

Attribute Type: bits (send|recv|detail)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-all-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <all>send</all>
</ipi-ospf-debug_ospfv2-terminal-debug-packet-all-on>
```

**Command Syntax**

```
debug ospf packet ({send|recv|detail}|)
```

---

**no debug ospf packet ({send|recv|detail}|)**

Attribute Name: all

Attribute Type: bits (send|recv|detail)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-all-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <all>send</all>
</ipi-ospf-debug_ospfv2-terminal-debug-packet-all-off>
```

---

## Command Syntax

```
no debug ospf packet ({send|recv|detail}|)
```

---

## debug ospf packet hello ({send|recv|detail}|)

Attribute Name: hello

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-hello-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <hello>send</hello>  
</ipi-ospf-debug_ospfv2-terminal-debug-packet-hello-on>
```

## Command Syntax

```
debug ospf packet hello ({send|recv|detail}|)
```

---

## no debug ospf packet hello ({send|recv|detail}|)

Attribute Name: hello

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-hello-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <hello>send</hello>  
</ipi-ospf-debug_ospfv2-terminal-debug-packet-hello-off>
```

## Command Syntax

```
no debug ospf packet hello ({send|recv|detail}|)
```

---

## debug ospf packet dd ({send|recv|detail}|)

Attribute Name: dd

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-dd-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <dd>send</dd>  
</ipi-ospf-debug_ospfv2-terminal-debug-packet-dd-on>
```

## Command Syntax

```
debug ospf packet dd ({send|recv|detail}|)
```

---

## no debug ospf packet dd ({send|recv|detail}|)

Attribute Name: dd

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-dd-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <dd>send</dd>
</ipi-ospf-debug_ospfv2-terminal-debug-packet-dd-off>
```

### Command Syntax

```
no debug ospf packet dd ({send|recv|detail}|)
```

---

## debug ospf packet ls-request ({send|recv|detail}|)

Attribute Name: ls-request

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-request-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <ls-request>send</ls-request>
</ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-request-on>
```

### Command Syntax

```
debug ospf packet ls-request ({send|recv|detail}|)
```

---

## no debug ospf packet ls-request ({send|recv|detail}|)

Attribute Name: ls-request

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-request-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <ls-request>send</ls-request>
</ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-request-off>
```

### Command Syntax

```
no debug ospf packet ls-request ({send|recv|detail}|)
```

---

## debug ospf packet ls-update ({send|recv|detail}|)

Attribute Name: ls-update

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-update-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <ls-update>send</ls-update>
</ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-update-on>
```

---

## Command Syntax

```
debug ospf packet ls-update ({send|recv|detail}|)
```

---

## no debug ospf packet ls-update ({send|recv|detail}|)

Attribute Name: ls-update

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-update-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <ls-update>send</ls-update>  
</ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-update-off>
```

## Command Syntax

```
no debug ospf packet ls-update ({send|recv|detail}|)
```

---

## debug ospf packet ls-ack ({send|recv|detail}|)

Attribute Name: ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-ack-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <ls-ack>send</ls-ack>  
</ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-ack-on>
```

## Command Syntax

```
debug ospf packet ls-ack ({send|recv|detail}|)
```

---

## no debug ospf packet ls-ack ({send|recv|detail}|)

Attribute Name: ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-ack-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <ls-ack>send</ls-ack>  
</ipi-ospf-debug_ospfv2-terminal-debug-packet-ls-ack-off>
```

## Command Syntax

```
no debug ospf packet ls-ack ({send|recv|detail}|)
```

---

## debug ospf nsm ({interface|redistribute}|)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-nsm-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <nsm>interface</nsm>
</ipi-ospf-debug_ospfv2-terminal-debug-nsm-on>
```

### Command Syntax

```
debug ospf nsm ({interface|redistribute}|)
```

---

## no debug ospf nsm ({interface|redistribute}|)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-nsm-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <nsm>interface</nsm>
</ipi-ospf-debug_ospfv2-terminal-debug-nsm-off>
```

### Command Syntax

```
no debug ospf nsm ({interface|redistribute}|)
```

---

## debug ospf nfsm ({status|events|timers}|)

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-nfsm-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <nfsm>status</nfsm>
</ipi-ospf-debug_ospfv2-terminal-debug-nfsm-on>
```

### Command Syntax

```
debug ospf nfsm ({status|events|timers}|)
```

---

## no debug ospf nfsm ({status|events|timers}|)

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-nfsm-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <nfsm>status</nfsm>
</ipi-ospf-debug_ospfv2-terminal-debug-nfsm-off>
```

---

**Command Syntax**

```
no debug ospf nfsm ({status|events|timers}|)
```

---

**debug ospf lsa ({generate|flooding|install|refresh|maxage}|)**

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-lsa-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <lsa>generate</lsa>
</ipi-ospf-debug_ospfv2-terminal-debug-lsa-on>
```

**Command Syntax**

```
debug ospf lsa ({generate|flooding|install|refresh|maxage}|)
```

---

**no debug ospf lsa ({generate|flooding|install|refresh|maxage}|)**

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-lsa-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <lsa>generate</lsa>
</ipi-ospf-debug_ospfv2-terminal-debug-lsa-off>
```

**Command Syntax**

```
no debug ospf lsa ({generate|flooding|install|refresh|maxage}|)
```

---

**debug ospf ifsm ({status|events|timers}|)**

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

**Netconf RPC payload**

```
<ipi-ospf-debug_ospfv2-terminal-debug-ifsm-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <ifsm>status</ifsm>
</ipi-ospf-debug_ospfv2-terminal-debug-ifsm-on>
```

**Command Syntax**

```
debug ospf ifsm ({status|events|timers}|)
```

---

**no debug ospf ifsm ({status|events|timers}|)**

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-ifsm-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf">
  <ifsm>status</ifsm>
</ipi-ospf-debug_ospfv2-terminal-debug-ifsm-off>
```

### Command Syntax

```
no debug ospf ifsm ({status|events|timers}|)
```

---

## debug ospf events ({abr|nssa|asbr|vlink|lsa|os|router}|)

Attribute Name: events

Attribute Type: bits (abr|nssa|asbr|vlink|lsa|os|router)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-events-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <events>abr</events>
</ipi-ospf-debug_ospfv2-terminal-debug-events-on>
```

### Command Syntax

```
debug ospf events ({abr|nssa|asbr|vlink|lsa|os|router}|)
```

---

## no debug ospf events ({abr|nssa|asbr|vlink|lsa|os|router}|)

Attribute Name: events

Attribute Type: bits (abr|nssa|asbr|vlink|lsa|os|router)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-events-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <events>abr</events>
</ipi-ospf-debug_ospfv2-terminal-debug-events-off>
```

### Command Syntax

```
no debug ospf events ({abr|nssa|asbr|vlink|lsa|os|router}|)
```

---

## debug ip ospf all

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-all-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
debug ip ospf all
```

---

## no debug ip ospf all

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-all-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
no debug ip ospf all
```

---

## debug ip ospf retransmission

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-retransmission-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
debug ip ospf retransmission
```

---

## no debug ip ospf retransmission

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-retransmission-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
no debug ip ospf retransmission
```

---

## debug ip ospf lfa

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-lfa-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
debug ip ospf lfa
```

---

## no debug ip ospf lfa

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-lfa-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
no debug ip ospf lfa
```



---

## debug ip ospf policy

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-policy-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
debug ip ospf policy
```

---

## no debug ip ospf policy

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-policy-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf"/>
```

### Command Syntax

```
no debug ip ospf policy
```

---

## debug ip ospf redistribute ({detail|terse})

Attribute Name: redistribute

Attribute Type: bits (detail|terse)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-redistribute-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <redistribute>detail</redistribute>  
</ipi-ospf-debug_ospfv2-terminal-debug-redistribute-on>
```

### Command Syntax

```
debug ip ospf redistribute ({detail|terse})
```

---

## no debug ip ospf redistribute ({detail|terse})

Attribute Name: redistribute

Attribute Type: bits (detail|terse)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-redistribute-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospf">  
  <redistribute>detail</redistribute>  
</ipi-ospf-debug_ospfv2-terminal-debug-redistribute-off>
```

### Command Syntax

```
no debug ip ospf redistribute ({detail|terse})
```

---

## debug ip ospf graceful-restart ({detail|terse})

Attribute Name: graceful-restart

Attribute Type: bits (detail|terse)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-graceful-restart-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <graceful-restart>detail</graceful-restart>
</ipi-ospf-debug_ospfv2-terminal-debug-graceful-restart-on>
```

### Command Syntax

```
debug ip ospf graceful-restart ({detail|terse})
```

---

## no debug ip ospf graceful-restart ({detail|terse})

Attribute Name: graceful-restart

Attribute Type: bits (detail|terse)

### Netconf RPC payload

```
<ipi-ospf-debug_ospfv2-terminal-debug-graceful-restart-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <graceful-restart>detail</graceful-restart>
</ipi-ospf-debug_ospfv2-terminal-debug-graceful-restart-off>
```

### Command Syntax

```
no debug ip ospf graceful-restart ({detail|terse})
```

---

## IPI-OSPF-INTERFACE

---

### Configure cost

Use this attribute to explicitly specify the cost of the link-state metric in a router-LSA.

Attribute Name: cost

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-65535

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
```

```

    </config>
    <cost>1</cost> <!-- operation="delete"-->
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf cost <1-65535>
```

---

## Configure priority

Use this attribute to set the router priority to determine the designated router (DR) for the network.

Attribute Name: priority

Attribute Type: uint8

Default Value: 1

Attribute Range: 0-255

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <priority>0</priority> <!-- operation="delete"-->
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf priority <0-255>
```

---

## Configure mtu ignore

Use this attribute to configure OSPF so that it does not check the MTU size during DD (Database Description) exchange.

Attribute Name: mtu-ignore

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>

```

```

    </config>
    </mtu-ignore><!-- operation="delete"-->
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf mtu-ignore
```

---

## Configure network type

Use this attribute to set the interface network type.

Attribute Name: network-type

Attribute Type: enum (point-to-point|broadcast|non-broadcast|point-to-multipoint|point-to-multipoint non-broadcast)

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <network-type>point-to-point</network-type> <!-- operation="delete"-->
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf network (point-to-point|broadcast|non-broadcast|point-to-multipoint|point-
to-multipoint non-broadcast)
```

---

## Configure disable all ospf

Use this attribute to completely disable OSPF packet processing on an interface.

Attribute Name: disable-all-ospf

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    </disable-all-ospf><!-- operation="delete"-->
</interface>

```

```
</interfaces>
</ospfv2>
```

## Command Syntax

```
ip ospf disable all
```

---

## Configure mtu

Use this attribute to set MTU size for OSPF to construct packets based on this value.

Attribute Name: mtu

Attribute Type: uint16

Default Value: 576

Attribute Range: 576-65535

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <mtu>576</mtu> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ospfv2>
```

## Command Syntax

```
ip ospf mtu <576-65535>
```

---

## Configure enable flood reduction

Use this attribute to enable flood reduction on an interface.

Attribute Name: enable-flood-reduction

Attribute Type: empty

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-flood-reduction><!-- operation="delete"-->
    </interface>
  </interfaces>
</ospfv2>
```

```
</ospfv2>
```

## Command Syntax

```
ip ospf flood-reduction
```

---

## Configure enable demand circuit

Use this attribute to enable Hello Suppression and LSA Suppression sent on OSPF interface.

Attribute Name: enable-demand-circuit

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-demand-circuit><!-- operation="delete"-->
    </interface>
  </interfaces>
</ospfv2>
```

## Command Syntax

```
ip ospf demand-circuit
```

---

## Configure enable bfd

Use this attribute to enable Bidirectional Forwarding Detection (BFD).

Attribute Name: enable-bfd

Attribute Type: enum (enable|disable)

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <enable-bfd>enable</enable-bfd> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ospfv2>
```

## Command Syntax

```
ip ospf bfd (disable|)
```

---

## Configure disable fast reroute

Use this attribute to prohibit the interface from being used as the next hop in a repair path.

Attribute Name: disable-fast-reroute

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </disable-fast-reroute><!-- operation="delete"-->
    </interface>
  </interfaces>
</ospfv2>
```

### Command Syntax

```
ip ospf fast-reroute per-prefix candidate disable
```

---

## Configure message digest id

Use this attribute to set the authentication message digest key ID.

Attribute Name: message-digest-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: message-digest-encryption-type

Attribute Type: enum (md5)

Attribute Name: message-digest-key

Attribute Type: string

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <addresses>
        <address>
          <interface-address>A.B.C.D</interface-address>
        </address>
      </addresses>
    </interface>
  </interfaces>
</ospfv2>
```

```

    </config>
    <authentication>
    <message-digests>
    <message-digest>
        <message-digest-id>1</message-digest-id>
        <config>
            <message-digest-id>1</message-digest-id>
            <message-digest-encryption-type>md5</message-digest-encryption-type>
            <message-digest-key>WORD</message-digest-key>
        </config>
    </message-digest>
    </message-digests>
</authentication>
</address>
</addresses>
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf A.B.C.D message-digest-key <1-255> (md5) WORD
```

---

## Configure name

Use this attribute to set the authentication message digest key ID.

Attribute Name: message-digest-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: message-digest-encryption-type

Attribute Type: enum (md5)

Attribute Name: message-digest-key

Attribute Type: string

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <authentication>
    <message-digests>
    <message-digest>
        <message-digest-id>1</message-digest-id>
        <config>
            <message-digest-id>1</message-digest-id>

```



```

        <message-digest-encryption-type>md5</message-digest-encryption-type>
        <message-digest-key>WORD</message-digest-key>
    </config>
</message-digest>
</message-digests>
</authentication>
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf message-digest-key <1-255> (md5) WORD
```

---

## Configure authentication type

Use this attribute to configure authentication on this interface.

Attribute Name: authentication-type

Attribute Type: enum (null|simple|message-digest)

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <addresses>
    <address>
        <interface-address>A.B.C.D</interface-address>
        <config>
            <interface-address>A.B.C.D</interface-address>
        </config>
        <authentication>
        <config>
            <authentication-type>simple</authentication-type> <!--
operation="delete"-->
        </config>
        </authentication>
    </address>
    </addresses>
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf A.B.C.D authentication (null|message-digest|)
```

---

## Configure key

Use this attribute to set the authentication password (key).

Attribute Name: key

Attribute Type: string

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <addresses>
        <address>
          <interface-address>A.B.C.D</interface-address>
          <config>
            <interface-address>A.B.C.D</interface-address>
          </config>
          <authentication>
            <config>
              <key>WORD</key> <!-- operation="delete"-->
            </config>
          </authentication>
        </address>
      </addresses>
    </interface>
  </interfaces>
</ospfv2>
```

### Command Syntax

```
ip ospf A.B.C.D authentication-key WORD
```

---

## Configure message digest encryption type

Use this attribute to set the authentication message digest key ID.

Attribute Name: message-digest-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: message-digest-encryption-type

Attribute Type: enum (md5)

Attribute Name: message-digest-key

Attribute Type: string

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <authentication>
  <message-digests>
  <message-digest> <!-- operation="delete"-->
    <message-digest-id>1</message-digest-id>
    <config>
      <message-digest-id>1</message-digest-id>
      <message-digest-encryption-type>md5</message-digest-encryption-type>
      <message-digest-key>WORD</message-digest-key>
    </config>
    </message-digest>
  </message-digests>
</authentication>
</interface>
</interfaces>
</ospfv2>

```

**Command Syntax**

```
ip ospf message-digest-key <1-255> (md5) WORD
```

---

**Configure filter out**

Use this attribute to turn on the LSA database-filter for a particular interface. OSPF floods new LSAs over all interfaces in an area, except the interface on which the LSA arrives. This redundancy ensures robust flooding. However, too much redundancy can waste bandwidth and might lead to excessive link and CPU usage in certain topologies, resulting in destabilizing the network. To avoid this, use this attribute to block flooding of LSAs over specified interfaces.

Attribute Name: filter-out

Attribute Type: empty

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <addresses>
  <address>
    <interface-address>A.B.C.D</interface-address>
  </config>
    <interface-address>A.B.C.D</interface-address>
  </address>
</addresses>
</interface>
</interfaces>
</ospfv2>

```

```

    </config>
    <database-filter>
    <lsa>
    <config>
        </filter-out><!-- operation="delete"-->
    </config>
    </lsa>
</database-filter>
</address>
</addresses>
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf A.B.C.D database-filter all out
```

---

## Configure dead interval

Use this attribute to set the interval during which the router waits to receive an OSPF hello packet from the neighbor before declaring the neighbor down.

Attribute Name: dead-interval

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <addresses>
    <address>
        <interface-address>A.B.C.D</interface-address>
        <config>
            <interface-address>A.B.C.D</interface-address>
        </config>
        <timers>
        <config>
            <dead-interval>1</dead-interval> <!-- operation="delete"-->
        </config>
        </timers>
    </address>
</addresses>
</interface>
</interfaces>
</ospfv2>

```

---

## Command Syntax

```
ip ospf A.B.C.D dead-interval <1-65535>
```

---

## Configure hello interval

Use this attribute to specify the interval between hello packets.

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

## Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <addresses>
        <address>
          <interface-address>A.B.C.D</interface-address>
          <config>
            <interface-address>A.B.C.D</interface-address>
          </config>
          <timers>
            <config>
              <hello-interval>1</hello-interval> <!-- operation="delete"-->
            </config>
          </timers>
        </address>
      </addresses>
    </interface>
  </interfaces>
</ospfv2>
```

## Command Syntax

```
ip ospf A.B.C.D hello-interval <1-65535>
```

---

## Configure retransmission interval

Use this attribute to specify the time between link-state advertisement (LSA) retransmissions for adjacencies belonging to the interface.

Attribute Name: retransmission-interval

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-3600

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <addresses>
        <address>
          <interface-address>A.B.C.D</interface-address>
          <config>
            <interface-address>A.B.C.D</interface-address>
          </config>
          <timers>
            <config>
              <retransmission-interval>1</retransmission-interval> <!--
operation="delete"-->
            </config>
          </timers>
        </address>
      </addresses>
    </interface>
  </interfaces>
</ospfv2>
```

### Command Syntax

```
ip ospf A.B.C.D retransmit-interval <1-3600>
```

---

## Configure transmit delay

Use this attribute to set the estimated time it takes to transmit a link-state-update packet on the interface.

Attribute Name: transmit-delay

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-3600

### Netconf edit-config payload

```
<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <timers>
```

```

    <config>
      <transmit-delay>1</transmit-delay> <!-- operation="delete"-->
    </config>
  </timers>
</interface>
</interfaces>
</ospfv2>

```

## Command Syntax

```
ip ospf transmit-delay <1-3600>
```

---

## Configure resync timeout

Use this attribute to configure the interval after which adjacency is reset if oob-resync is not started.

Attribute Name: resync-timeout

Attribute Type: uint16

Default Value: 40

Attribute Range: 1-65535

## Netconf edit-config payload

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
        </config>
        <timers>
          <config>
            <resync-timeout>1</resync-timeout> <!-- operation="delete"-->
          </config>
        </timers>
      </interface>
    </interfaces>
  </ospfv2>

```

## Command Syntax

```
ip ospf resync-timeout <1-65535>
```

---

## Configure interface address

Use this attribute to explicitly specify the cost of the link-state metric in a router-LSA.

Attribute Name: cost

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <addresses>
  <address>
    <interface-address>A.B.C.D</interface-address>
    <config>
      <interface-address>A.B.C.D</interface-address>
    </config>
    <cost>1</cost> <!-- operation="delete"-->
  </address>
</addresses>
</interface>
</interfaces>
</ospfv2>

```

**Command Syntax**

```
ip ospf A.B.C.D cost <1-65535>
```

---

**Configure message digest key**

Use this attribute to set the authentication message digest key ID.

Attribute Name: message-digest-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: message-digest-encryption-type

Attribute Type: enum (md5)

Attribute Name: message-digest-key

Attribute Type: string

**Netconf edit-config payload**

```

<ospfv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospf">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <addresses>
  <address>
    <interface-address>A.B.C.D</interface-address>
    <config>

```



```

    <interface-address>A.B.C.D</interface-address>
  </config>
  <authentication>
    <message-digests>
      <message-digest>
        <message-digest-id>1</message-digest-id>
        <config>
          <message-digest-id>1</message-digest-id>
          <message-digest-encryption-type>md5</message-digest-encryption-type>
          <message-digest-key>WORD</message-digest-key>
        </config>
      </message-digest>
    </message-digests>
  </authentication>
</address>
</addresses>
</interface>
</interfaces>
</ospfv2>

```

### Command Syntax

```
ip ospf A.B.C.D message-digest-key <1-255> (md5) WORD
```

---

## IPI-OSPFV3

---

### Configure display route on single line

Use this attribute to display the output of the show ipv6 ospf route command with each route entry in a singleline.

Attribute Name: display-route-on-single-line

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <global>
    <config>
      </display-route-on-single-line><!-- operation="delete"-->
    </config>
  </global>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf display route single-line
```

---

## Configure grace period

Use this attribute to enable the graceful restart feature and set the grace period for restarting the router

This command is supported when following feature are enabled Restart capability

Attribute Name: grace-period

Attribute Type: uint16

Default Value: 120

Attribute Range: 2-1800

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <global>
    <graceful-restart>
      <config>
        <grace-period>2</grace-period> <!-- operation="delete"-->
      </config>
    </graceful-restart>
  </global>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf restart grace-period <2-1800>
```

---

## Configure controlled restarts only

Use this attribute to enable the graceful restart controlled restarts only for the router

This command is supported when following feature are enabled Restart capability

Attribute Name: controlled-restarts-only

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <global>
    <graceful-restart>
      <config>
        </controlled-restarts-only><!-- operation="delete"-->
      </config>
    </graceful-restart>
  </global>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf restart planned-only
```

---

## Configure max grace period

Use this attribute to set the maximum grace period to act as helper. i.e Help only if received grace-period is less than set value.

This command is supported when following feature are enabled Restart capability

Attribute Name: max-grace-period

Attribute Type: uint16

Attribute Range: 2-1800

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <global>
    <graceful-restart>
      <helper>
        <config>
          <max-grace-period>2</max-grace-period> <!-- operation="delete"-->
        </config>
      </helper>
    </graceful-restart>
  </global>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf restart helper max-grace-period <2-1800>
```

---

## Configure disable all neighbors

Use this attribute to set disable acting as helper for all neighbors.

This command is supported when following feature are enabled Restart capability

Attribute Name: disable-all-neighbors

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <global>
    <graceful-restart>
      <helper>
        <config>
          </disable-all-neighbors><!-- operation="delete"-->
        </config>
      </helper>
    </graceful-restart>
  </global>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf restart helper never
```

---

## Configure disable neighbor

Use this attribute to set disable acting as helper for specified neighbor.

This command is supported when following feature are enabled Restart capability

Attribute Name: disable-neighbor

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <global>
    <graceful-restart>
      <helper>
        <config>
          <disable-neighbor>A.B.C.D</disable-neighbor> <!-- operation="delete"-->
        </config>
      </helper>
    </graceful-restart>
  </global>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf restart helper never router-id A.B.C.D
```

---

## Configure vrf name

VRF Name to associate with this instance

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
      <vrf-name>WORD</vrf-name>
    </process>
  </processes>
</ospfv3>
```

### Command Syntax

```
router ipv6 vrf ospf WORD
```

---

## Configure ospfv3 id

Use this attribute to set the OSPFv3 process ID

Attribute Name: ospfv3-id

Attribute Type: string

Attribute Range: 0-254

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process> <!-- operation="delete"-->
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
        <vrf-name>WORD</vrf-name>
      </config>
    </process>
  </processes>
</ospfv3>
```

### Command Syntax

```
router ipv6 ospf (WORD|) (WORD|)
```

---

## Configure router id

Use this attribute to set a router ID for the OSPFv3 process. Configure each router OSPFv3 with an unique router ID

Attribute Name: router-id

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
      <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
    </process>
  </processes>
</ospfv3>
```

### Command Syntax

```
router-id A.B.C.D
```

---

## Configure bfd enable all interfaces

Use this attribute to enable Bidirectional Forwarding Detection (BFD) on all interfaces.

Attribute Name: bfd-enable-all-interfaces

Attribute Type: empty

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
      </bfd-enable-all-interfaces><!-- operation="delete"-->
    </process>
  </processes>
</ospfv3>
```

**Command Syntax**

```
bfd all-interfaces
```

---

**Configure database summary**

Use this attribute to enable the database summary list optimization for OSPFv3.

Attribute Name: database-summary

Attribute Type: empty

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
      </database-summary><!-- operation="delete"-->
    </process>
  </processes>
</ospfv3>
```

**Command Syntax**

```
enable db-summary-opt
```

---

**Configure area border type**

Use this attribute to set an OSPFv3 Area Border Router (ABR) type.

Attribute Name: area-border-type

Attribute Type: enum (standard|cisco|ibm)

Default Value: cisco

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
```

```

<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
  <area-border-type>cisco</area-border-type> <!-- operation="delete"-->
</process>
</processes>
</ospfv3>

```

### Command Syntax

```
abr-type (standard|cisco|ibm)
```

---

## Configure default metric

Use this attribute to set a default metric for OSPFv3.

Attribute Name: default-metric

Attribute Type: uint32

Default Value: 20

Attribute Range: 1-16777214

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
  <default-metric>1</default-metric> <!-- operation="delete"-->
</process>
</processes>
</ospfv3>

```

### Command Syntax

```
default-metric <1-16777214>
```

---

## Configure shutdown

Use this attribute to specify an OSPFv3 shutdown

Attribute Name: shutdown

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>

```

```

<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
  </shutdown><!-- operation="delete"-->
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
shutdown
```

---

## Configure log adjacency changes

Use this attribute for the the router to send a SYSLOG message when an OSPFv3 neighbor goes up or down.

Attribute Name: log-adjacency-changes

Attribute Type: enum (brief|detail)

Default Value: brief

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
      <log-adjacency-changes>brief</log-adjacency-changes> <!-- operation="delete"-->
    </process>
  </processes>
</ospfv3>

```

## Command Syntax

```
log-adjacency-changes (brief|detail|)
```

---

## Configure reference bandwidth

Use this attribute to control how OSPFv3 calculates the default metric for the interface.

Attribute Name: reference-bandwidth

Attribute Type: uint32

Default Value: 100

Attribute Range: 1-4294967

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>

```



```

<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
  <reference-bandwidth>1</reference-bandwidth> <!-- operation="delete"-->
</process>
</processes>
</ospfv3>

```

### Command Syntax

```
auto-cost reference-bandwidth <1-4294967>
```

---

## Configure max database descriptors

Use this attribute to limit the number of Database Descriptors (DD) that can be processed concurrently.

Attribute Name: max-database-descriptors

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-65535

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
        </config>
        <max-database-descriptors>1</max-database-descriptors> <!-- operation="delete"-->
      </process>
    </processes>
  </ospfv3>

```

### Command Syntax

```
max-concurrent-dd <1-65535>
```

---

## Configure default distance

Default administrative distance value

Attribute Name: default-distance

Attribute Type: uint8

Default Value: 110

Attribute Range: 1-254

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    <administrative-distance>
      <config>
        <default-distance>1</default-distance> <!-- operation="delete"-->
      </config>
    </administrative-distance>
  </process>
</processes>
</ospfv3>

```

**Command Syntax**

```
distance <1-254>
```

---

**Configure intra area distance**

Administrative distance for intra-area routes

Attribute Name: intra-area-distance

Attribute Type: uint8

Default Value: 110

Attribute Range: 1-254

Attribute Name: inter-area-distance

Attribute Type: uint8

Default Value: 110

Attribute Range: 1-254

Attribute Name: external-routes-distance

Attribute Type: uint8

Default Value: 110

Attribute Range: 1-254

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    <administrative-distance>

```

```

<ospf>
<config>
  <inter-area-distance>1</inter-area-distance> <!-- operation="delete"-->
  <external-routes-distance>1</external-routes-distance> <!--
operation="delete"-->
  <intra-area-distance>1</intra-area-distance> <!-- operation="delete"-->
</config>
</ospf>
</administrative-distance>
</process>
</processes>
</ospfv3>

```

### Command Syntax

```
distance ospfv3 { intra-area <1-254>| inter-area <1-254>| external <1-254> }
```

---

## Configure disable graceful restart

Graceful OSPFv3 Restart

Attribute Name: disable-graceful-restart

Attribute Type: empty

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
<capability>
<config>
  </disable-graceful-restart><!-- operation="delete"-->
</config>
</capability>
</process>
</processes>
</ospfv3>

```

### Command Syntax

```
no capability restart
```

---

## Configure exponential max delay

Use this attribute to set the maximum SPF hold delay time in milliseconds

Attribute Name: exponential-max-delay

Attribute Type: uint32

Attribute Range: 0-2147483647

Attribute Name: exponential-min-delay

Attribute Type: uint32

Attribute Range: 0-2147483647

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <timers>
    <spf>
      <config>
        <exponential-min-delay>0</exponential-min-delay>
        <exponential-max-delay>0</exponential-max-delay>
      </config>
    </spf>
  </timers>
</ospfv3>
```

### Command Syntax

```
timers spf exp <0-2147483647> <0-2147483647>
```

---

## Configure all interfaces

Use this attribute to set all interfaces as passive

Attribute Name: all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
        <passive-interfaces>
          <config>
            </all-interfaces><!-- operation="delete"-->
          </config>
        </passive-interfaces>
      </config>
    </process>
  </processes>
```

```
</ospfv3>
```

## Command Syntax

```
passive-interface
```

---

## Configure name

Use this attribute to set interface as passive or not.

Attribute Name: name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: passive-mode

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <passive-interfaces>
    <passive-interface> <!-- operation="delete"-->
      <name>IFNAME</name>
      <config>
        <name>WORD</name>
        <passive-mode>enable</passive-mode>
      </config>
    </passive-interface>
  </passive-interfaces>
</ospfv3>
```

## Command Syntax

```
passive-interface IFNAME (disable|enable)
```

---

## Configure address

Use this attribute to summarize or suppress external routes with the specified address range.

Attribute Name: address

Attribute Type: string

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
```

```

<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
<summary-addresses>
<summary-address> <!-- operation="delete"-->
  <address>X:X::X:X/M</address>
  <config>
    <address>X:X::X:X/M</address>
  </config>
</summary-address>
</summary-addresses>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
summary-address X:X::X:X/M
```

---

## Configure translate tag

Use this attribute to set or unset translate tag to external routes with the specified address range.

Attribute Name: translate-tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

Attribute Name: all-tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
  <process>
    <ospfv3-id>WORD</ospfv3-id>
    <config>
      <ospfv3-id>0</ospfv3-id>
    </config>
  <summary-addresses>
  <summary-address>
    <address>X:X::X:X/M</address>
    <config>
      <address>X:X::X:X/M</address>
      <all-tag>0</all-tag> <!-- operation="delete"-->
    </config>
  </summary-address>
  </summary-addresses>
  </process>
  </processes>
</ospfv3>

```

```

        <translate-tag>0</translate-tag> <!-- operation="delete"-->
</summary-address>
</summary-addresses>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
summary-address X:X::X:X/M all-tag <0-4294967295> translate-tag <0-4294967295>
```

---

## Configure not advertise

Use this attribute to set or unset not advertise to summarize or suppress external routes with the specified address range.

Attribute Name: not-advertise

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
<summary-addresses>
<summary-address>
  <address>X:X::X:X/M</address>
  <config>
    <address>X:X::X:X/M</address>
  </config>
  </not-advertise><!-- operation="delete"-->
</summary-address>
</summary-addresses>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
summary-address X:X::X:X/M not-advertise
```

---

## Configure all tag

Use this attribute to set or unset all tag to summarize or suppress external routes with the specified address range.

Attribute Name: all-tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
      <summary-addresses>
        <summary-address>
          <address>X:X::X:X/M</address>
          <config>
            <address>X:X::X:X/M</address>
          </config>
          <all-tag>0</all-tag> <!-- operation="delete"-->
        </summary-address>
      </summary-addresses>
    </process>
  </processes>
</ospfv3>
```

### Command Syntax

```
summary-address X:X::X:X/M all-tag <0-4294967295>
```

---

## Configure originate

Use this attribute to create a default external route into an OSPF routing domain. The system acts like an Autonomous System Boundary Router (ASBR) when you use the default-information originate command to redistribute routes into an OSPF routing domain. An ASBR does not by default generate a default route into the OSPF routing domain

Attribute Name: originate

Attribute Type: uint8

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
        </config>
      <default-information>
        <config>
          </originate><!-- operation="delete"-->
        </config>
      </default-information>
    </process>
  </processes>
```



```
</ospfv3>
```

## Command Syntax

```
default-information originate
```

---

## Configure route map

Use this attribute to set route-map instance.

Attribute Name: route-map

Attribute Type: string

Attribute Range: 1-63

Attribute Name: originate

Attribute Type: empty

Attribute Name: always-advertise-default-route

Attribute Type: empty

Attribute Name: metric

Attribute Type: uint32

Default Value: 20

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <default-information>
    <config>
      </originate><!-- operation="delete"-->
      </always-advertise-default-route><!-- operation="delete"-->
      <metric>0</metric> <!-- operation="delete"-->
      <metric-type>2</metric-type> <!-- operation="delete"-->
      <route-map>WORD</route-map> <!-- operation="delete"-->
    </config>
  </default-information>
</ospfv3>
```

## Command Syntax

```
default-information originate { always| metric <0-16777214>| metric-type (1|2)|
route-map WORD }
```

---

## Configure access control list

Use this attribute to set the access control list name in distribution list.

This command is supported when following feature are enabled HAVE\_ACL

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
<distribute-list>
<filter-in>
<config>
  <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
</config>
</filter-in>
</distribute-list>
</process>
</processes>
</ospfv3>
```

## Command Syntax

```
distribute-list WORD in
```

---

## Configure protocol

Use this attribute to import routes from other routing protocols, or from another OSPF instance, into OSPFv3 ASexternal-LSAs.

This command is supported when following feature are enabled HAVE\_ACL

Attribute Name: protocol

Attribute Type: enum (kernel|connected|static|rip|bgp|isis)

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <filter-out>
    <routing-protocols>
      <routing-protocol>
        <protocol>kernel</protocol>
        <config>
          <protocol>kernel</protocol>
          <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
        </config>
      </routing-protocol>
    </routing-protocols>
  </filter-out>
</ospfv3>

```

**Command Syntax**

```

distribute-list WORD out (kernel|connected|static|rip|bgp|isis)

```

**Configure ospf process id**

Use this attribute to filter networks in routing updates.

This command is supported when following feature are enabled HAVE\_ACL

Attribute Name: ospf-process-id

Attribute Type: string

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <filter-out>
    <routing-protocols>
      <routing-protocol>
        <protocol>kernel</protocol>
        <config>
          <protocol>kernel</protocol>
          <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
        </config>
      </routing-protocol>
    </routing-protocols>
  </filter-out>
</ospfv3>

```

```

<filter-out>
<ospf-processes>
<ospf-process>
  <ospf-process-id>1-65535</ospf-process-id>
  <config>
    <ospf-process-id>WORD</ospf-process-id>
    <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
  </config>
</ospf-process>
</ospf-processes>
</filter-out>
</distribute-list>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
distribute-list WORD out ospf (WORD|)
```

---

## Configure metric

Use this attribute to inform the value of the metric for OSPFv3 default route.

Attribute Name: metric

Attribute Type: uint32

Default Value: 1

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

Attribute Name: route-map

Attribute Type: string

Attribute Name: route-tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
</ospfv3>

```

```

<routing-protocols>
<routing-protocol>
  <protocol>kernel</protocol>
  <config>
    <protocol>kernel</protocol>
    <metric-type>2</metric-type> <!-- operation="delete"-->
    <route-map>WORD</route-map> <!-- operation="delete"-->
    <route-tag>0</route-tag> <!-- operation="delete"-->
  </config>
  <metric>0</metric> <!-- operation="delete"-->
</routing-protocol>
</routing-protocols>
</redistribute>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```

redistribute (kernel|connected|static|rip|bgp|isis) { metric <0-16777214>| metric-
  type (1|2)| route-map WORD| tag <0-4294967295> }

```

## Configure metric type

Use this attribute to inform the value of the metric for OSPFv3 default route.

Attribute Name: metric

Attribute Type: uint32

Default Value: 1

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

Attribute Name: route-map

Attribute Type: string

Attribute Name: route-tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>

```

```

    </config>
  <redistribute>
    <ospf-processes>
      <ospf-process>
        <ospf-process-id>WORD</ospf-process-id>
        <config>
          <ospf-process-id>WORD</ospf-process-id>
          <metric-type>2</metric-type> <!-- operation="delete"-->
          <route-map>WORD</route-map> <!-- operation="delete"-->
          <route-tag>0</route-tag> <!-- operation="delete"-->
        </config>
        <metric>0</metric> <!-- operation="delete"-->
      </ospf-process>
    </ospf-processes>
  </redistribute>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```

redistribute ospf (WORD|) { metric <0-16777214>| metric-type (1|2)| route-map WORD|
tag <0-4294967295> }

```

## Configure default cost

Use this attribute to set the cost for default summary route sent into a stub area. If an area is configured as a stub, the OSPFv3 router originates one type-3 inter-area-prefix-LSA into the stub area. This attribute changes the metric for this LSA.

Attribute Name: default-cost

Attribute Type: uint32

Default Value: 1

Attribute Range: 0-16777215

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    <areas>
      <area>
        <area-id>OSPFV3_AREA_T</area-id>
        <config>
          <area-id>OSPFV3_AREA_T</area-id>
          <default-cost>0</default-cost> <!-- operation="delete"-->
        </config>
      </area>
    </areas>
  </process>
</ospfv3>

```

```

</areas>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
area (A.B.C.D|<0-4294967295>) default-cost <0-16777215>
```

---

## Configure no summary

Use this attribute to do not inject inter-area routes into stub.

Attribute Name: no-summary

Attribute Type: empty

Attribute Name: enable

Attribute Type: empty

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
      </config>
      <stub>
        <config>
          </enable><!-- operation="delete"-->
          </no-summary><!-- operation="delete"-->
        </config>
      </stub>
    </area>
  </areas>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
area stub no-summary
```

---

## Configure enable

Use this attribute to define an area as a stub area on all routers.

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
      </config>
      <stub>
        <config>
          </enable>
        </config>
      </stub>
    </area>
  </areas>
</ospfv3>
```

### Command Syntax

```
area stub
```

---

## Configure area id

Use this attribute to set an area as a Not-So-Stubby-Area (NSSA).

Attribute Name: enable

Attribute Type: uint8

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
```



```

    <area-id>OSPFV3_AREA_T</area-id>
  </config>
  <nssa>
  <config>
    </enable><!-- operation="delete"-->
  </config>
</nssa>
</area>
</areas>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
area nssa
```

---

## Configure remote router id

Use this attribute to set the interface IP address of the neighbor.

Attribute Name: remote-router-id

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
  <process>
    <ospfv3-id>WORD</ospfv3-id>
    <config>
      <ospfv3-id>0</ospfv3-id>
    </config>
  </process>
  </processes>
  <areas>
  <area>
    <area-id>OSPFV3_AREA_T</area-id>
    <config>
      <area-id>OSPFV3_AREA_T</area-id>
    </config>
    <virtual-links>
    <virtual-link> <!-- operation="delete"-->
      <remote-router-id>A.B.C.D</remote-router-id>
      <config>
        <remote-router-id>A.B.C.D</remote-router-id>
      </config>
    </virtual-link>
  </virtual-links>
  </area>
  </areas>
</process>
</processes>
</ospfv3>

```

---

**Command Syntax**

```
area virtual-link A.B.C.D
```

---

**Configure bfd fall over**

Use this attribute to enable BFD on a virtual-link.

Attribute Name: bfd-fall-over

Attribute Type: empty

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
        <virtual-links>
          <virtual-link>
            <remote-router-id>A.B.C.D</remote-router-id>
            <config>
              <remote-router-id>A.B.C.D</remote-router-id>
              </bfd-fall-over><!-- operation="delete"-->
            </config>
          </virtual-link>
        </virtual-links>
      </config>
    </area>
  </areas>
</ospfv3>
```

**Command Syntax**

```
area virtual-link A.B.C.D fall-over bfd
```

---

**Configure instance id**

The OSPFv3 instance.

Attribute Name: instance-id

Attribute Type: uint8

Default Value: 0

Attribute Range: 0-31,64-95

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
      </config>
      <virtual-links>
        <virtual-link>
          <remote-router-id>A.B.C.D</remote-router-id>
          <config>
            <remote-router-id>A.B.C.D</remote-router-id>
          </config>
          <instance-id>0</instance-id> <!-- operation="delete"-->
        </virtual-link>
      </virtual-links>
    </area>
  </areas>
</ospfv3>
```

### Command Syntax

```
area virtual-link A.B.C.D instance-id (<0-31>|<64-95>)
```

---

## Configure authentication cryptomap

Use this attribute to set the Crypto-map used to setup IPsec SA.

Attribute Name: authentication-cryptomap

Attribute Type: string

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
```

```

<area>
  <area-id>OSPFV3_AREA_T</area-id>
  <config>
    <area-id>OSPFV3_AREA_T</area-id>
  </config>
  <virtual-links>
    <virtual-link>
      <remote-router-id>A.B.C.D</remote-router-id>
      <config>
        <remote-router-id>A.B.C.D</remote-router-id>
      </config>
      <authentication-cryptomap>WORD</authentication-cryptomap> <!--
operation="delete"-->
    </virtual-link>
  </virtual-links>
</area>
</areas>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
area virtual-link A.B.C.D authentication cryptomap WORD
```

---

## Configure dead interval

Use this command to set the amount of time that the router waits to receive an OSPF hello packet from the neighbor before declaring the neighbor down.

Attribute Name: dead-interval

Attribute Type: uint16

Default Value: 40

Attribute Range: 1-65535

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

Attribute Name: transmission-delay

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-1800

Attribute Name: retransmission-interval

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-1800

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    </process>
  </processes>
  <areas>
    <area>
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
      </config>
      <virtual-links>
        <virtual-link>
          <remote-router-id>A.B.C.D</remote-router-id>
          <config>
            <remote-router-id>A.B.C.D</remote-router-id>
          </config>
          <timers>
            <config>
              <hello-interval>1</hello-interval> <!-- operation="delete"-->
              <transmission-delay>1</transmission-delay> <!-- operation="delete"-->
              <retransmission-interval>1</retransmission-interval> <!--
operation="delete"-->
              <dead-interval>1</dead-interval> <!-- operation="delete"-->
            </config>
          </timers>
        </virtual-link>
      </virtual-links>
    </area>
  </areas>
</ospfv3>

```

**Command Syntax**

```

area virtual-link A.B.C.D { dead-interval <1-65535>| hello-interval <1-65535>|
  transmit-delay <1-1800>| retransmit-interval <1-1800> }

```

**Configure tag**

Use this attribute to configure the Tag value to use as a match value for controlling redistribution via route maps.

Attribute Name: tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    <address-family>
      <ipv4>
        <summary-addresses>
          <summary-address>
            <address>A.B.C.D/M</address>
            <config>
              <address>A.B.C.D/M</address>
            </config>
            <tag>0</tag> <!-- operation="delete"-->
          </summary-address>
        </summary-addresses>
      </ipv4>
    </address-family>
  </process>
</processes>
</ospfv3>

```

**Command Syntax**

```
summary-address A.B.C.D/M tag <0-4294967295>
```

**Configure always advertise default route**

Use this attribute to set route-map instance.

Attribute Name: route-map

Attribute Type: string

Attribute Range: 1-63

Attribute Name: originate

Attribute Type: empty

Attribute Name: always-advertise-default-route

Attribute Type: empty

Attribute Name: metric

Attribute Type: uint32

Default Value: 20

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    <address-family>
      <ipv4>
        <default-information>
          <config>
            </originate><!-- operation="delete"-->
            </always-advertise-default-route><!-- operation="delete"-->
            <metric>0</metric> <!-- operation="delete"-->
            <metric-type>2</metric-type> <!-- operation="delete"-->
            <route-map>WORD</route-map> <!-- operation="delete"-->
          </config>
        </default-information>
      </ipv4>
    </address-family>
  </process>
</processes>
</ospfv3>
```

### Command Syntax

```
default-information originate { always| metric <0-16777214>| metric-type (1|2)|
  route-map WORD }
```

## Configure protocol af

Use this attribute to import routes from other routing protocols, or from another OSPF instance, into OSPFv3 ASexternal-LSAs.

Attribute Name: protocol-af

Attribute Type: enum (kernel|connected|static|rip|bgp|isis)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <processes>
    <process>
      <ospfv3-id>WORD</ospfv3-id>
      <config>
        <ospfv3-id>0</ospfv3-id>
      </config>
    <address-family>
      <ipv4>
        <redistribute>
```

```

<routing-protocols>
<routing-protocol> <!-- operation="delete"-->
  <protocol-af>kernel</protocol-af>
  <config>
    <protocol-af>kernel</protocol-af>
  </config>
</routing-protocol>
</routing-protocols>
</redistribute>
</ipv4>
</address-family>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
redistribute (kernel|connected|static|rip|bgp|isis)
```

---

## Configure route tag

Use this attribute to inform the value of the metric for OSPFv3 default route.

Attribute Name: metric

Attribute Type: uint32

Default Value: 1

Attribute Range: 0-16777214

Attribute Name: metric-type

Attribute Type: enum (1|2)

Default Value: 2

Attribute Name: route-map

Attribute Type: string

Attribute Name: route-tag

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
<address-family>
<ipv4>

```



```

<redistribute>
<routing-protocols>
<routing-protocol>
  <protocol-af>kernel</protocol-af>
  <config>
    <protocol-af>kernel</protocol-af>
    <metric-type>2</metric-type> <!-- operation="delete"-->
    <route-map>WORD</route-map> <!-- operation="delete"-->
    <route-tag>0</route-tag> <!-- operation="delete"-->
  </config>
  <metric>0</metric> <!-- operation="delete"-->
</routing-protocol>
</routing-protocols>
</redistribute>
</ipv4>
</address-family>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```

redistribute (kernel|connected|static|rip|bgp|isis) { metric <0-16777214>| metric-
type (1|2)| route-map WORD| tag <0-4294967295> }

```

## Configure ospfv2 process id

Use this attribute to specify OSPF routes.

Attribute Name: ospfv2-process-id

Attribute Type: uint16

Attribute Range: 0-65535

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<processes>
<process>
  <ospfv3-id>WORD</ospfv3-id>
  <config>
    <ospfv3-id>0</ospfv3-id>
  </config>
<address-family>
<ipv4>
<redistribute>
<ospf-processes>
<ospf-process> <!-- operation="delete"-->
  <ospfv2-process-id>0</ospfv2-process-id>
  <config>
    <ospfv2-process-id>0</ospfv2-process-id>
  </config>
</ospf-process>

```

```

</ospf-processes>
</redistribute>
</ipv4>
</address-family>
</process>
</processes>
</ospfv3>

```

## Command Syntax

```
redistribute ospf (<0-65535>|)
```

---

## Configure retransmission

OSPFv3 retransmission information

Attribute Name: retransmission

Attribute Type: uint8

Attribute Name: bfd

Attribute Type: empty

Attribute Name: events

Attribute Type: bits (abr|asbr|vlink|os|router|nssa)

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

Attribute Name: n fsm

Attribute Type: bits (status|events|timers)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install)

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

Attribute Name: packet-hello

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-dd

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-request

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-update

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<debug>
<config>
  </bfd><!-- operation="delete"-->
  <events>abr</events> <!-- operation="delete"-->
  <ifsm>status</ifsm> <!-- operation="delete"-->
  <lsa>generate</lsa> <!-- operation="delete"-->
  <nfsm>status</nfsm> <!-- operation="delete"-->
  <nsm>interface</nsm> <!-- operation="delete"-->
  <route>spf</route> <!-- operation="delete"-->
  <rib>interface</rib> <!-- operation="delete"-->
  <packet-hello>send</packet-hello> <!-- operation="delete"-->
  <packet-dd>send</packet-dd> <!-- operation="delete"-->
  <packet-ls-request>send</packet-ls-request> <!-- operation="delete"-->
  <packet-ls-update>send</packet-ls-update> <!-- operation="delete"-->
  <packet-ls-ack>send</packet-ls-ack> <!-- operation="delete"-->
  </retransmission><!-- operation="delete"-->
</config>
</debug>
</ospfv3>
```

### Command Syntax

```
debug ipv6 ospf
```

## Configure bfd

OSPFv3 retransmission information

Attribute Name: retransmission

Attribute Type: uint8

Attribute Name: bfd

Attribute Type: empty

Attribute Name: events

Attribute Type: bits (abr|asbr|vlink|os|router|nssa)

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install)

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

Attribute Name: packet-hello

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-dd

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-request

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-update

Attribute Type: bits (send|recv|detail)

Attribute Name: packet-ls-ack

Attribute Type: bits (send|recv|detail)

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    </bfd><!-- operation="delete"-->
    <events>abr</events> <!-- operation="delete"-->
    <ifsm>status</ifsm> <!-- operation="delete"-->
    <lsa>generate</lsa> <!-- operation="delete"-->
    <nfsm>status</nfsm> <!-- operation="delete"-->
    <nsm>interface</nsm> <!-- operation="delete"-->
    <route>spf</route> <!-- operation="delete"-->
    <rib>interface</rib> <!-- operation="delete"-->
    <packet-hello>send</packet-hello> <!-- operation="delete"-->
    <packet-dd>send</packet-dd> <!-- operation="delete"-->
    <packet-ls-request>send</packet-ls-request> <!-- operation="delete"-->
    <packet-ls-update>send</packet-ls-update> <!-- operation="delete"-->
    <packet-ls-ack>send</packet-ls-ack> <!-- operation="delete"-->
    </retransmission><!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

## Command Syntax

```
debug ipv6 ospf all
```

## Configure events

OSPFv3 events information

Attribute Name: events

Attribute Type: bits (abr|asbr|vlink|os|router|nssa)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    <events>abr</events> <!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

### Command Syntax

```
debug ipv6 ospf events ({abr|asbr|vlink|os|router|nssa}|)
```

---

## Configure ifsm

Use this attribute to enable OSPFv3 Interface State Machine debug

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    <ifsm>status</ifsm> <!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

### Command Syntax

```
debug ipv6 ospf ifsm ({status|events|timers}|)
```

---

## Configure lsa

Use this attribute to enable OSPFv3 Link State Advertisement debug

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    <lsa>generate</lsa> <!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

---

## Command Syntax

```
debug ipv6 ospf lsa ({generate|flooding|install|refresh|maxage}|)
```

---

## Configure nfsm

Use this attribute to enable OSPFv3 Neighbor State Machine debug

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
    <config>
      <nfsm>status</nfsm> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv3>
```

## Command Syntax

```
debug ipv6 ospf nfsm ({status|events|timers}|)
```

---

## Configure nsm

Use this attribute to enable OSPFv3 NSM information debug

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
    <config>
      <nsm>interface</nsm> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv3>
```

## Command Syntax

```
debug ipv6 ospf nsm ({interface|redistribute}|)
```

---

## Configure rib

Use this attribute to enable OSPFv3 RIB information debug

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

---

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    <rib>interface</rib> <!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

**Command Syntax**

```
debug ipv6 ospf rib ({interface|redistribute|})
```

---

**Configure route**

Use this attribute to enable OSPFv3 route information debug

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install)

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    <route>spf</route> <!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

**Command Syntax**

```
debug ipv6 ospf route ({spf|ia|ase|install|})
```

---

**Configure packet hello**

OSPFv3 Hello

Attribute Name: packet-hello

Attribute Type: bits (send|recv|detail)

**Netconf edit-config payload**

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
  <config>
    <packet-hello>send</packet-hello> <!-- operation="delete"-->
  </config>
</debug>
</ospfv3>
```

**Command Syntax**

```
debug ipv6 ospf packet hello ({send|recv|detail|})
```

---

## Configure packet dd

OSPFv3 Database Description

Attribute Name: packet-dd

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<debug>
<config>
  <packet-dd>send</packet-dd> <!-- operation="delete"-->
</config>
</debug>
</ospfv3>
```

### Command Syntax

```
debug ipv6 ospf packet dd ({send|recv|detail}|)
```

---

## Configure packet ls request

OSPFv3 Link State Request

Attribute Name: packet-ls-request

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<debug>
<config>
  <packet-ls-request>send</packet-ls-request> <!-- operation="delete"-->
</config>
</debug>
</ospfv3>
```

### Command Syntax

```
debug ipv6 ospf packet ls-request ({send|recv|detail}|)
```

---

## Configure packet ls update

OSPFv3 Link State Update

Attribute Name: packet-ls-update

Attribute Type: bits (send|recv|detail)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<debug>
<config>
  <packet-ls-update>send</packet-ls-update> <!-- operation="delete"-->
</config>
</debug>
</ospfv3>
```



```
</config>
</debug>
</ospfv3>
```

## Command Syntax

```
debug ipv6 ospf packet ls-update ({send|recv|detail}|)
```

---

## Configure packet ls ack

OSPFv3 Link State Acknowledgment

Attribute Name: packet-ls-ack

Attribute Type: bits (send|recv|detail)

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <debug>
    <config>
      <packet-ls-ack>send</packet-ls-ack> <!-- operation="delete"-->
    </config>
  </debug>
</ospfv3>
```

## Command Syntax

```
debug ipv6 ospf packet ls-ack ({send|recv|detail}|)
```

---

## debug ipv6 ospf

## Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-ospf-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

## Command Syntax

```
debug ipv6 ospf
```

---

## no debug ipv6 ospf

## Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-ospf-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

## Command Syntax

```
no debug ipv6 ospf
```

---

## debug ipv6 ospf all

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-ospf-all-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
debug ipv6 ospf all
```

---

## no debug ipv6 ospf all

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-ospf-all-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
no debug ipv6 ospf all
```

---

## debug ipv6 ospf bfd

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-bfd-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
debug ipv6 ospf bfd
```

---

## no debug ipv6 ospf bfd

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-bfd-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
no debug ipv6 ospf bfd
```

---

## debug ipv6 ospf retransmission

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-retransmission-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
debug ipv6 ospf retransmission
```

---

---

## no debug ipv6 ospf retransmission

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-retransmission-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
no debug ipv6 ospf retransmission
```

---

## debug ipv6 ospf events ({abr|asbr|vlink|os|router|nssa})

Attribute Name: events

Attribute Type: bits (abr|asbr|vlink|os|router|nssa)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-events-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <events>abr</events>
</ipi-ospfv3-debug_ospfv3-terminal-debug-events-on>
```

### Command Syntax

```
debug ipv6 ospf events ({abr|asbr|vlink|os|router|nssa})
```

---

## no debug ipv6 ospf events ({abr|asbr|vlink|os|router|nssa})

Attribute Name: events

Attribute Type: bits (abr|asbr|vlink|os|router|nssa)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-events-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <events>abr</events>
</ipi-ospfv3-debug_ospfv3-terminal-debug-events-off>
```

### Command Syntax

```
no debug ipv6 ospf events ({abr|asbr|vlink|os|router|nssa})
```

---

## debug ipv6 ospf ifsm ({status|events|timers})

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-ifsm-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <ifsm>status</ifsm>
</ipi-ospfv3-debug_ospfv3-terminal-debug-ifsm-on>
```

---

## Command Syntax

```
debug ipv6 ospf ifsm ({status|events|timers}|)
```

---

## no debug ipv6 ospf ifsm ({status|events|timers}|)

Attribute Name: ifsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-ifsm-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <ifsm>status</ifsm>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-ifsm-off>
```

## Command Syntax

```
no debug ipv6 ospf ifsm ({status|events|timers}|)
```

---

## debug ipv6 ospf lsa ({generate|flooding|install|refresh|maxage}|)

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-lsa-on xmlns="http://www.ipinfusion.com/  
yang/ocnos/ipi-ospfv3">  
  <lsa>generate</lsa>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-lsa-on>
```

## Command Syntax

```
debug ipv6 ospf lsa ({generate|flooding|install|refresh|maxage}|)
```

---

## no debug ipv6 ospf lsa ({generate|flooding|install|refresh|maxage}|)

Attribute Name: lsa

Attribute Type: bits (generate|flooding|install|refresh|maxage)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-lsa-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <lsa>generate</lsa>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-lsa-off>
```

## Command Syntax

```
no debug ipv6 ospf lsa ({generate|flooding|install|refresh|maxage}|)
```

---

## debug ipv6 ospf nfsm ({status|events|timers}|)

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-nfsm-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <nfsm>status</nfsm>
</ipi-ospfv3-debug_ospfv3-terminal-debug-nfsm-on>
```

### Command Syntax

```
debug ipv6 ospf nfsm ({status|events|timers}|)
```

---

## no debug ipv6 ospf nfsm ({status|events|timers}|)

Attribute Name: nfsm

Attribute Type: bits (status|events|timers)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-nfsm-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <nfsm>status</nfsm>
</ipi-ospfv3-debug_ospfv3-terminal-debug-nfsm-off>
```

### Command Syntax

```
no debug ipv6 ospf nfsm ({status|events|timers}|)
```

---

## debug ipv6 ospf nsm ({interface|redistribute}|)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-nsm-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospfv3">
  <nsm>interface</nsm>
</ipi-ospfv3-debug_ospfv3-terminal-debug-nsm-on>
```

### Command Syntax

```
debug ipv6 ospf nsm ({interface|redistribute}|)
```

---

## no debug ipv6 ospf nsm ({interface|redistribute}|)

Attribute Name: nsm

Attribute Type: bits (interface|redistribute)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-nsm-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <nsm>interface</nsm>
</ipi-ospfv3-debug_ospfv3-terminal-debug-nsm-off>
```

---

## Command Syntax

```
no debug ipv6 ospf nsm ({interface|redistribute|})
```

---

## debug ipv6 ospf packet ({send|recv|detail|})

Attribute Name: all

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-all-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <all>send</all>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-all-on>
```

## Command Syntax

```
debug ipv6 ospf packet ({send|recv|detail|})
```

---

## no debug ipv6 ospf packet ({send|recv|detail|})

Attribute Name: all

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-all-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <all>send</all>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-all-off>
```

## Command Syntax

```
no debug ipv6 ospf packet ({send|recv|detail|})
```

---

## debug ipv6 ospf packet hello ({send|recv|detail|})

Attribute Name: hello

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-hello-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <hello>send</hello>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-hello-on>
```

## Command Syntax

```
debug ipv6 ospf packet hello ({send|recv|detail|})
```

---

## no debug ipv6 ospf packet hello ({send|recv|detail|})

Attribute Name: hello

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-hello-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <hello>send</hello>
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-hello-off>
```

### Command Syntax

```
no debug ipv6 ospf packet hello ({send|recv|detail}|)
```

---

## debug ipv6 ospf packet dd ({send|recv|detail}|)

Attribute Name: dd

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-dd-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <dd>send</dd>
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-dd-on>
```

### Command Syntax

```
debug ipv6 ospf packet dd ({send|recv|detail}|)
```

---

## no debug ipv6 ospf packet dd ({send|recv|detail}|)

Attribute Name: dd

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-dd-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <dd>send</dd>
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-dd-off>
```

### Command Syntax

```
no debug ipv6 ospf packet dd ({send|recv|detail}|)
```

---

## debug ipv6 ospf packet ls-request ({send|recv|detail}|)

Attribute Name: ls-request

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-request-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <ls-request>send</ls-request>
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-request-on>
```

---

## Command Syntax

```
debug ipv6 ospf packet ls-request ({send|recv|detail}|)
```

---

## no debug ipv6 ospf packet ls-request ({send|recv|detail}|)

Attribute Name: ls-request

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-request-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <ls-request>send</ls-request>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-request-off>
```

## Command Syntax

```
no debug ipv6 ospf packet ls-request ({send|recv|detail}|)
```

---

## debug ipv6 ospf packet ls-update ({send|recv|detail}|)

Attribute Name: ls-update

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-update-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <ls-update>send</ls-update>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-update-on>
```

## Command Syntax

```
debug ipv6 ospf packet ls-update ({send|recv|detail}|)
```

---

## no debug ipv6 ospf packet ls-update ({send|recv|detail}|)

Attribute Name: ls-update

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-update-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <ls-update>send</ls-update>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-update-off>
```

## Command Syntax

```
no debug ipv6 ospf packet ls-update ({send|recv|detail}|)
```

---

## debug ipv6 ospf packet ls-ack ({send|recv|detail}|)

Attribute Name: ls-ack



Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-ack-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <ls-ack>send</ls-ack>
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-ack-on>
```

### Command Syntax

```
debug ipv6 ospf packet ls-ack ({send|recv|detail}|)
```

---

## no debug ipv6 ospf packet ls-ack ({send|recv|detail}|)

Attribute Name: ls-ack

Attribute Type: bits (send|recv|detail)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-ack-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <ls-ack>send</ls-ack>
</ipi-ospfv3-debug_ospfv3-terminal-debug-packet-ls-ack-off>
```

### Command Syntax

```
no debug ipv6 ospf packet ls-ack ({send|recv|detail}|)
```

---

## debug ipv6 ospf rib ({interface|redistribute}|)

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-rib-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospfv3">
  <rib>interface</rib>
</ipi-ospfv3-debug_ospfv3-terminal-debug-rib-on>
```

### Command Syntax

```
debug ipv6 ospf rib ({interface|redistribute}|)
```

---

## no debug ipv6 ospf rib ({interface|redistribute}|)

Attribute Name: rib

Attribute Type: bits (interface|redistribute)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-rib-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <rib>interface</rib>
</ipi-ospfv3-debug_ospfv3-terminal-debug-rib-off>
```

---

## Command Syntax

```
no debug ipv6 ospf rib ({interface|redistribute|})
```

---

## debug ipv6 ospf route ({spf|ia|ase|install|})

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-route-on xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <route>spf</route>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-route-on>
```

## Command Syntax

```
debug ipv6 ospf route ({spf|ia|ase|install|})
```

---

## no debug ipv6 ospf route ({spf|ia|ase|install|})

Attribute Name: route

Attribute Type: bits (spf|ia|ase|install)

### Netconf RPC payload

```
<ipi-ospfv3-debug_ospfv3-terminal-debug-route-off xmlns="http://  
www.ipinfusion.com/yang/ocnos/ipi-ospfv3">  
  <route>spf</route>  
</ipi-ospfv3-debug_ospfv3-terminal-debug-route-off>
```

## Command Syntax

```
no debug ipv6 ospf route ({spf|ia|ase|install|})
```

---

## clear ipv6 ospf (WORD|) process

Attribute Name: process-id

Attribute Type: string

### Netconf RPC payload

```
<ipi-ospfv3-global_ospfv3-clear-process xmlns="http://www.ipinfusion.com/yang/  
ocnos/ipi-ospfv3">  
  <process-id>WORD</process-id>  
</ipi-ospfv3-global_ospfv3-clear-process>
```

## Command Syntax

```
clear ipv6 ospf (WORD|) process
```

---

## restart ipv6 ospf graceful (grace-period <2-1800>|)

Attribute Name: grace-period

Attribute Type: uint16

Attribute Range: 2-1800

### Netconf RPC payload

```
<ipi-ospfv3-global_ospfv3-graceful-restart xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-ospfv3">
  <grace-period>2</grace-period>
</ipi-ospfv3-global_ospfv3-graceful-restart>
```

### Command Syntax

```
restart ipv6 ospf graceful (grace-period <2-1800>|)
```

---

## snmp restart ospf6

### Netconf RPC payload

```
<ipi-ospfv3-global_ospfv3-snmp-restart xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-ospfv3"/>
```

### Command Syntax

```
snmp restart ospf6
```

---

## IPI-OSPFV3-INTERFACE

---

### Configure shutdown

Use this attribute to shutdown OSPFV3 on the interface

Attribute Name: shutdown

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      </shutdown><!-- operation="delete"-->
    </interface>
  </interfaces>
</ospfv3>
```

### Command Syntax

```
ospfv3 shutdown
```

---

## Configure enable link lsa suppression

Use this attribute to enable or disable link LSA (type 8) suppression. A type 8 LSA gives information about link-local addresses and a list of IPv6 addresses on the link. If enabled and the interface type is not broadcast or NBMA, the router does not send type 8 link LSAs. This implies that other routers on the link determine the router's next-hop address using a mechanism other than the type 8 link LSA. This feature is implicitly disabled if the interface type is broadcast or NBMA.

Attribute Name: enable-link-lsa-suppression

Attribute Type: uint8

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <instances>
        <instance>
          <instance-id>0</instance-id>
          <config>
            <instance-id>0</instance-id>
          </config>
          </enable-link-lsa-suppression><!-- operation="delete"-->
        </instance>
      </instances>
    </interface>
  </interfaces>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf link-lsa-suppression enable (instance-id (<0-31>|<64-95>))|)
```

---

## Configure enable bfd

Use this attribute to enable Bidirectional Forwarding Detection (BFD)

Attribute Name: enable-bfd

Attribute Type: boolean

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
    </interface>
  </interfaces>
</ospfv3>
```

```

    <instances>
    <instance>
      <instance-id>0</instance-id>
      <config>
        <instance-id>0</instance-id>
      </config>
      <enable-bfd>true</enable-bfd> <!-- operation="delete"-->
    </instance>
  </instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf bfd (instance-id (<0-31>|<64-95>))
```

---

## Configure interface name

Use this attribute to enable Bidirectional Forwarding Detection (BFD)

Attribute Name: enable-bfd

Attribute Type: boolean

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <instances>
  <instance>
    <instance-id>0</instance-id>
    <config>
      <instance-id>0</instance-id>
    </config>
    <enable-bfd>true</enable-bfd> <!-- operation="delete"-->
  </instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf bfd disable (instance-id (<0-31>|<64-95>))
```

---

## Configure instance id

Use this attribute to enable or disable link LSA (type 8) suppression. A type 8 LSA gives information about link-local addresses and a list of IPv6 addresses on the link. If enabled and the interface type is not broadcast or NBMA, the router does not send type 8 link LSAs. This implies that other routers on the link determine the router's next-hop address using a mechanism other than the type 8 link LSA. This feature is implicitly disabled if the interface type is broadcast or NBMA.

Attribute Name: enable-link-lsa-suppression

Attribute Type: uint8

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <instances>
        <instance>
          <instance-id>0</instance-id>
          <config>
            <instance-id>0</instance-id>
          </config>
          </enable-link-lsa-suppression><!-- operation="delete"-->
        </instance>
      </instances>
    </interface>
  </interfaces>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf link-lsa-suppression enable (instance-id (<0-31>|<64-95>))|)
```

---

## Configure network type

Use this attribute to set an OSPFv3 network type.

Attribute Name: network-type

Attribute Type: enum (point-to-point|broadcast|non-broadcast|point-to-multipoint|point-to-multipoint non-broadcast)

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
    </interface>
  </interfaces>
</ospfv3>
```

```

<instances>
<instance>
  <instance-id>0</instance-id>
  <config>
    <instance-id>0</instance-id>
  </config>
  <network-type>point-to-point</network-type> <!-- operation="delete"-->
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

## Command Syntax

```

ipv6 ospf network (point-to-point|broadcast|non-broadcast|point-to-
multipoint|point-to-multipoint non-broadcast) (instance-id (<0-31>|<64-95>))

```

## Configure cost

Use this attribute to specify the link-cost described in LSAs. The cost (or metric) of an interface in OSPF indicates the overhead required to send packets across a certain interface. The value is taken to describe Link State information, and used for route calculation.

Attribute Name: cost

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-65535

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <instances>
  <instance>
    <instance-id>0</instance-id>
    <config>
      <instance-id>0</instance-id>
    </config>
    <cost>1</cost> <!-- operation="delete"-->
  </instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

## Command Syntax

```
ipv6 ospf cost <1-65535> (instance-id (<0-31>|<64-95>))
```

---

## Configure priority

Use this attribute to set the router priority for determining the designated router (DR) for the network. A router with the higher router priority becomes the DR. If the priority is the same for two routers, the router with the higher router ID takes precedence. Only routers with a nonzero priority value are eligible to become the designated or backup designated router. Configure router priority for broadcast or NBMA networks only and not for point-to-point networks.

Attribute Name: priority

Attribute Type: uint8

Default Value: 1

Attribute Range: 0-255

## Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <instances>
        <instance>
          <instance-id>0</instance-id>
          <config>
            <instance-id>0</instance-id>
            </config>
            <priority>0</priority> <!-- operation="delete"-->
          </instance>
        </instances>
      </interface>
    </interfaces>
  </ospfv3>
```

## Command Syntax

```
ipv6 ospf priority <0-255> (instance-id (<0-31>|<64-95>))
```

---

## Configure mtu

Use this attribute to set MTU size for OSPFv3 to construct packets based on this value. Whenever OSPFv3 constructs packets, it uses interface MTU size as Maximum IP packet size. this attribute forces OSPFv3 to use the specified value overriding the actual interface MTU size.

Attribute Name: mtu

Attribute Type: uint16

Default Value: 1500



Attribute Range: 1280-65535

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
<instances>
<instance>
  <instance-id>0</instance-id>
  <config>
    <instance-id>0</instance-id>
  </config>
  <mtu>1280</mtu> <!-- operation="delete"-->
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>
```

### Command Syntax

```
ipv6 ospf mtu <1280-65535> (instance-id (<0-31>|<64-95>))
```

## Configure mtu ignore

Use this attribute to ignore the MTU size during DD (Database Description) exchange. By default, during the DD exchange process, OSPFv3 checks the MTU size described in DD packets received from its neighbor, and if the MTU size does not match the interface MTU, the neighbor adjacency is not established. Using this command makes OSPFv3 ignore this check and allows establishing of adjacency regardless of MTU size in the DD packet.

Attribute Name: mtu-ignore

Attribute Type: empty

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
<instances>
<instance>
  <instance-id>0</instance-id>
  <config>
    <instance-id>0</instance-id>
  </config>
```

```

        </mtu-ignore><!-- operation="delete"-->
    </instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf mtu-ignore (instance-id (<0-31>|<64-95>))
```

---

## Configure authentication cryptomap

Use this attribute to set the Crypto-map used to setup IPsec SA.

Attribute Name: authentication-cryptomap

Attribute Type: string

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
    <interface-name>WORD</interface-name>
    <config>
        <interface-name>WORD</interface-name>
    </config>
    <instances>
    <instance>
        <instance-id>0</instance-id>
        <config>
            <instance-id>0</instance-id>
        </config>
        <authentication-cryptomap>WORD</authentication-cryptomap> <!--
operation="delete"-->
    </instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf (instance-id (<0-31>|<64-95>)) authentication cryptomap WORD
```

---

## Configure area id

Use this attribute to enable OSPFv3 routing on an interface. Specify the process ID to configure multiple instances of OSPFv3. When running a single instance of OSPFv3, you do not need to specify a instance ID. When OSPFv3 receives a packet, it checks if the instance ID in the packet matches the instance ID of the receiving interface.

Attribute Name: area-id

Attribute Type: union

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <instances>
  <instance>
    <instance-id>0</instance-id>
    <config>
      <instance-id>0</instance-id>
    </config>
    <routers>
    <router> <!-- operation="delete"-->
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
        <ospfv3-id>WORD</ospfv3-id>
      </config>
      <ospfv3-id>WORD</ospfv3-id>
    </router>
    </routers>
  </instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

**Command Syntax**

```
ipv6 router ospf area (A.B.C.D|<0-4294967295>) (instance-id (<0-31>|<64-95>))
```

**Configure ospfv3 id**

Use this attribute to enable OSPFv3 routing on an interface. Specify the process ID to configure multiple instances of OSPFv3. When running a single instance of OSPFv3, you do not need to specify a instance ID. When OSPFv3 receives a packet, it checks if the instance ID in the packet matches the instance ID of the receiving interface.

Attribute Name: area-id

Attribute Type: uint32

**Netconf edit-config payload**

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>

```

```

<instances>
<instance>
  <instance-id>0</instance-id>
  <config>
    <instance-id>0</instance-id>
  </config>
  <routers>
    <router> <!-- operation="delete"-->
      <area-id>OSPFV3_AREA_T</area-id>
      <config>
        <area-id>OSPFV3_AREA_T</area-id>
        <ospfv3-id>WORD</ospfv3-id>
      </config>
      <ospfv3-id>WORD</ospfv3-id>
    </router>
  </routers>
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

## Command Syntax

```
ipv6 router ospf area (instance-id (<0-31>|<64-95>))
```

## Configure dead interval

Use this attribute to set the amount of time that the router waits to receive an OSPF hello packet from the neighbor before declaring the neighbor down

Attribute Name: dead-interval

Attribute Type: uint16

Default Value: 40

Attribute Range: 1-65535

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
<instances>
<instance>
  <instance-id>0</instance-id>
  <config>
    <instance-id>0</instance-id>
  </config>

```

```

        <timers>
        <config>
            <dead-interval>1</dead-interval> <!-- operation="delete"-->
        </config>
    </timers>
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf dead-interval <1-65535> (instance-id (<0-31>|<64-95>)|)
```

---

## Configure hello interval

Use this attribute to set the interval between hello packets.

Attribute Name: hello-interval

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
    <interface-name>WORD</interface-name>
    <config>
        <interface-name>WORD</interface-name>
    </config>
<instances>
<instance>
    <instance-id>0</instance-id>
    <config>
        <instance-id>0</instance-id>
    </config>
    <timers>
    <config>
        <hello-interval>1</hello-interval> <!-- operation="delete"-->
    </config>
    </timers>
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```
ipv6 ospf hello-interval <1-65535> (instance-id (<0-31>|<64-95>)|)
```

---

## Configure transmission delay

Use this attribute to set the estimated time it takes to transmit a Link State Update packet over the interface.

Attribute Name: transmission-delay

Attribute Type: uint16

Default Value: 1

Attribute Range: 1-1800

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <instances>
        <instance>
          <instance-id>0</instance-id>
          <config>
            <instance-id>0</instance-id>
            </config>
            <timers>
              <config>
                <transmission-delay>1</transmission-delay> <!-- operation="delete"-->
              </config>
            </timers>
          </instance>
        </instances>
      </interface>
    </interfaces>
  </ospfv3>
```

### Command Syntax

```
ipv6 ospf transmit-delay <1-1800> (instance-id (<0-31>|<64-95>)|)
```

---

## Configure retransmission interval

Use this attribute to set the interval between retransmission of Link State Update packets.

Attribute Name: retransmission-interval

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-1800

### Netconf edit-config payload

```
<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
```

```

<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <instances>
  <instance>
    <instance-id>0</instance-id>
    <config>
      <instance-id>0</instance-id>
    </config>
    <timers>
    <config>
      <retransmission-interval>1</retransmission-interval> <!--
operation="delete"-->
    </config>
    </timers>
  </instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

## Command Syntax

```
ipv6 ospf retransmit-interval <1-1800> (instance-id (<0-31>|<64-95>)|)
```

---

## Configure address

Static neighbor IPv6 link-local address

Attribute Name: address

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <instances>
  <instance>
    <instance-id>0</instance-id>
    <config>
      <instance-id>0</instance-id>
    </config>
    <neighbors-static>
    <neighbor-static> <!-- operation="delete"-->

```

```

        <address>X:X::X:X</address>
        <config>
            <address>X:X::X:X</address>
        </config>
    </neighbor-static>
</neighbors-static>
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

## Command Syntax

```
ipv6 ospf neighbor X:X::X:X (instance-id (<0-31>|<64-95>)) |)
```

## Configure poll interval

Use this attribute to set the dead neighbor polling interval in seconds. It is recommended to set this value much higher than the hello interval. The default is 120 seconds.

Attribute Name: poll-interval

Attribute Type: uint32

Default Value: 120

Attribute Range: 0-4294967295

Attribute Name: cost

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

Attribute Name: priority

Attribute Type: uint8

Default Value: 0

Attribute Range: 0-255

## Netconf edit-config payload

```

<ospfv3 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ospfv3">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
    </instances>
    <instance>
      <instance-id>0</instance-id>
      <config>
        <instance-id>0</instance-id>

```



```

</config>
<neighbors-static>
<neighbor-static>
  <address>X:X::X:X</address>
  <config>
    <address>X:X::X:X</address>
    <cost>1</cost> <!-- operation="delete"-->
    <priority>0</priority> <!-- operation="delete"-->
  </config>
  <poll-interval>0</poll-interval> <!-- operation="delete"-->
</neighbor-static>
</neighbors-static>
</instance>
</instances>
</interface>
</interfaces>
</ospfv3>

```

### Command Syntax

```

ipv6 ospf neighbor X:X::X:X { cost <1-65535>| priority <0-255>| poll-interval <0-4294967295> } (instance-id (<0-31>|<64-95>))

```

---

## IPI-BGP

---

### Configure action name

Use this attribute to specify a standard community list (1 to 99) that specifies BGP community attributes.

Attribute Name: action-name

Attribute Type: enum (deny|permit)

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<global>
<community-lists>
<numbered-lists>
<numbered-list>
  <standard-number>1</standard-number>
  <config>
    <standard-number>1</standard-number>
  </config>
<action-for-any>
<config>
  <action-name>deny</action-name>
</config>
</action-for-any>
</numbered-list>
</numbered-lists>

```

```

</community-lists>
</global>
</bgp>

```

## Command Syntax

```
ip community-list <1-99> (deny|permit)
```

---

## Configure action standard number

Use this attribute to specify a standard community list (1 to 99) that specifies BGP community attributes.

Attribute Name: action-standard-number

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <numbered-lists>
        <numbered-list>
          <standard-number>1</standard-number>
          <config>
            <standard-number>1</standard-number>
          </config>
        </numbered-list>
      </numbered-lists>
      <action-list-values>
        <action-list-value> <!-- operation="delete"-->
          <standard-number-value>AA:NN</standard-number-value>
          <config>
            <standard-number-value>WORD</standard-number-value>
            <action-standard-number>deny</action-standard-number>
          </config>
          <action-standard-number>deny</action-standard-number>
        </action-list-value>
      </action-list-values>
    </community-lists>
  </global>
</bgp>

```

## Command Syntax

```
ip community-list <1-99> (deny|permit) ((AA:NN|internet|local-AS|no-advertise|no-export))
```

---

## Configure action name standard

Use the community-lists to specify BGP community attributes. The community attribute is used for implementing policy routing. It is an optional, transitive attribute and facilitates transfer of local policies through different autonomous systems. It includes community values that are 32 bits long. There are two kinds of community-lists: expanded and standard. The standard community-list defines the community attributes in a specified format without regular

expressions. The expanded community-list defines the community attributes with regular expressions. Use this attribute to add a standard community-list entry. The standard community-list is compiled into binary format and is directly compared with the BGP communities attribute in the BGP updates. The comparison is faster than the expanded community-list. Any community value that does not match the standard community value is automatically treated as expanded.

Attribute Name: action-name-standard

Attribute Type: enum (deny|permit)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <standards>
        <standard>
          <name>WORD</name>
          <config>
            <name>WORD</name>
            <list-type>standard</list-type>
          </config>
          <list-type>standard</list-type>
        </standard>
      </standards>
      <action-values>
        <action-value> <!-- operation="delete"-->
          <community-value-standard>AA:NN</community-value-standard>
          <config>
            <community-value-standard>WORD</community-value-standard>
            <action-name-standard>deny</action-name-standard>
          </config>
          <action-name-standard>deny</action-name-standard>
        </action-value>
      </action-values>
    </community-lists>
  </global>
</bgp>
```

### Command Syntax

```
ip community-list WORD (deny|permit) ((AA:NN|internet|local-AS|no-advertise|no-export))
```

---

## Configure list type

Use this attribute to specify a standard community list (1 to 99) that specifies BGP community attributes.

Attribute Name: action-name

Attribute Type: enum (deny|permit)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
```

```

<community-lists>
<standards>
<standard>
  <name>WORD</name>
  <config>
    <name>WORD</name>
    <list-type>standard</list-type>
  </config>
  <list-type>standard</list-type>
</action-for-any>
<config>
  <action-name>deny</action-name>
</config>
</action-for-any>
</standard>
</standards>
</community-lists>
</global>
</bgp>

```

## Command Syntax

```
ip community-list (standard) WORD (deny|permit)
```

## Configure name

Use the community-lists to specify BGP community attributes. The community attribute is used for implementing policy routing. It is an optional, transitive attribute and facilitates transfer of local policies through different autonomous systems. It includes community values that are 32 bits long. There are two kinds of community-lists: expanded and standard. The standard community-list defines the community attributes in a specified format without regular expressions. The expanded community-list defines the community attributes with regular expressions. Use this attribute to add a standard community-list entry. The standard community-list is compiled into binary format and is directly compared with the BGP communities attribute in the BGP updates. The comparison is faster than the expanded community-list. Any community value that does not match the standard community value is automatically treated as expanded.

Attribute Name: action-name-standard

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<global>
<community-lists>
<standards>
<standard>
  <name>WORD</name>
  <config>
    <name>WORD</name>
    <list-type>standard</list-type>
  </config>
  <list-type>standard</list-type>
</action-values>

```

```

<action-value> <!-- operation="delete"-->
  <community-value-standard>AA:NN</community-value-standard>
  <config>
    <community-value-standard>WORD</community-value-standard>
    <action-name-standard>deny</action-name-standard>
  </config>
  <action-name-standard>deny</action-name-standard>
</action-value>
</action-values>
</standard>
</standards>
</community-lists>
</global>
</bgp>

```

## Command Syntax

```

ip community-list (standard) WORD (deny|permit) ((AA:NN|internet|local-AS|no-
advertise|no-export))

```

---

## Configure action expanded

Community list extended type

Attribute Name: action-expanded

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <expanded-lists>
        <expanded-list>
          <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
          <config>
            <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
            <list-type>expanded</list-type>
          </config>
          <list-type>expanded</list-type>
        </expanded-list>
      </expanded-lists>
      <action-values>
        <action-value> <!-- operation="delete"-->
          <regular-expression-list>LINE</regular-expression-list>
          <config>
            <regular-expression-list>LINE</regular-expression-list>
            <action-expanded>deny</action-expanded>
          </config>
          <action-expanded>deny</action-expanded>
        </action-value>
      </action-values>
    </community-lists>
  </global>
</bgp>

```

```

</community-lists>
</global>
</bgp>

```

## Command Syntax

```
ip community-list <100-500> (deny|permit) LINE
```

---

## Configure expanded type

Community list extended type

Attribute Name: action-expanded

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <expanded-lists>
        <expanded-list>
          <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
          <config>
            <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
            <list-type>expanded</list-type>
          </config>
          <list-type>expanded</list-type>
        </expanded-list>
      </expanded-lists>
      <action-values>
        <action-value> <!-- operation="delete"-->
          <regular-expression-list>LINE</regular-expression-list>
          <config>
            <regular-expression-list>LINE</regular-expression-list>
            <action-expanded>deny</action-expanded>
          </config>
          <action-expanded>deny</action-expanded>
        </action-value>
      </action-values>
    </expanded-list>
  </community-lists>
</global>
</bgp>

```

## Command Syntax

```
ip community-list (expanded) WORD (deny|permit) LINE
```

---

## Configure extended action number

Extended Community list type

Attribute Name: extended-action-number

Attribute Type: enum (deny|permit)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <extended-community>
        <numbered-lists>
          <numbered-list>
            <standard-number>1</standard-number>
            <config>
              <standard-number>1</standard-number>
            </config>
          </numbered-list>
        </numbered-lists>
      </extended-community>
    </community-lists>
  </global>
</bgp>
```

### Command Syntax

```
ip extcommunity-list <1-99> (deny|permit) LINE
```

---

## Configure extended action

extcommunity Community list type

Attribute Name: extended-action

Attribute Type: enum (deny|permit)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <extended-community>
        <standards>
          <standard>
            <name>WORD</name>
            <config>
              <name>WORD</name>
```

```

    </config>
  <action-values>
  <action-value> <!-- operation="delete"-->
    <value>AA:NN</value>
    <config>
      <value>WORD</value>
      <route-target-soo>rt</route-target-soo>
      <extended-action>deny</extended-action>
    </config>
    <route-target-soo>rt</route-target-soo>
    <extended-action>deny</extended-action>
  </action-value>
</action-values>
</standard>
</standards>
</extended-community>
</community-lists>
</global>
</bgp>

```

## Command Syntax

```
ip extcommunity-list standard WORD (deny|permit) (rt|soo) AA:NN
```

## Configure action

extcommunity Extended Community type

Attribute Name: action

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
  <community-lists>
  <extended-community>
  <expanded-lists>
  <expanded-list>
    <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
    <config>
      <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
      <list-type>expanded</list-type>
    </config>
    <list-type>expanded</list-type>
  </expanded-list>
  <action-values>
  <action-value> <!-- operation="delete"-->
    <value>LINE</value>
    <config>
      <value>LINE</value>
      <action>deny</action>
    </config>
  </action-value>
</action-values>
</extended-community>
</community-lists>
</global>
</bgp>

```



```

        <action>deny</action>
    </action-value>
</action-values>
</expanded-list>
</expanded-lists>
</extended-community>
</community-lists>
</global>
</bgp>

```

## Command Syntax

```
ip extcommunity-list <100-500> (deny|permit) LINE
```

---

## Configure value

extcommunity Extended Community type

Attribute Name: action

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <community-lists>
      <extended-community>
        <expanded-lists>
          <expanded-list>
            <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
            <config>
              <expanded-type>BGP_EXPANDED_LIST_TYPE_T</expanded-type>
              <list-type>expanded</list-type>
            </config>
            <list-type>expanded</list-type>
          </expanded-list>
        </expanded-lists>
      </extended-community>
    </community-lists>
  </global>
</bgp>

```

## Command Syntax

```
ip extcommunity-list (expanded) WORD (deny|permit) LINE
```

---

## Configure access list name

Use this attribute to define a BGP Autonomous System (AS) path access list. A named community list is a filter based on regular expressions. If the regular expression matches the specified string representing the AS path of the route, then the permit or deny condition applies. Use this attribute to define the BGP access list globally.

Attribute Name: access-list-name

Attribute Type: string

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <as-path-access-lists>
      <as-path-access-list> <!-- operation="delete"-->
        <access-list-regular-expression>LINE</access-list-regular-expression>
        <config>
          <access-list-regular-expression>LINE</access-list-regular-expression>
          <access-list-action>deny</access-list-action>
          <access-list-name>WORD</access-list-name>
        </config>
        <access-list-action>deny</access-list-action>
        <access-list-name>WORD</access-list-name>
      </as-path-access-list>
    </as-path-access-lists>
  </global>
</bgp>
```

## Command Syntax

```
ip as-path access-list WORD (deny|permit) LINE
```

---

## Configure enable aggregate nexthop

Use this attribute to set the BGP option to perform aggregation only when next-hop matches the specified IP address.

Attribute Name: enable-aggregate-nexthop

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </enable-aggregate-nexthop><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

---

## Command Syntax

```
bgp aggregate-nextthop-check
```

---

## Configure enable path select

Use this attribute to set RFC 1771 compatible path selection

Attribute Name: enable-path-select

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </enable-path-select><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

## Command Syntax

```
bgp rfc1771-path-select
```

---

## Configure disable adj out

Use this attribute to Disable BGP ADJ\_OUT.

Attribute Name: disable-adj-out

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </disable-adj-out><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

## Command Syntax

```
bgp disable-adj-out
```

---

## Configure disable rfc7606 error handling

Use this attribute to Disable RFC7606 revised error handling.

Attribute Name: disable-rfc7606-error-handling

Attribute Type: empty

---

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </disable-rfc7606-error-handling><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

## Command Syntax

```
bgp disable-rfc7606-error-handling
```

---

## Configure enable bogon filtering

Use this attribute to enable BOGON filtering

Attribute Name: enable-bogon-filtering

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </enable-bogon-filtering><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

## Command Syntax

```
bgp enable-bogon-filtering
```

---

## Configure enable extended asn capability

Use this attribute to configure a BGP router to send 4-octet ASN capabilities. If attempting to change the AS capability from 2 to 4 or 4 to 2, a prompt occurs to remove the VRF configuration (if it exists), and reconfiguration is required, because the route distinguisher (RD) configuration would have been created with the current (2 octet or 4 octet) capability, and must be reconfigured before attempting to change the capability. While loading from a saved configuration with AS4 capability and BGP VRF configuration, the capability will not be changed because of the above described reason.

Attribute Name: enable-extended-asn-capability

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </enable-extended-asn-capability><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

---

```
</bgp>
```

## Command Syntax

```
bgp extended-asn-cap
```

---

## Configure enable nexthop tracking

Use this attribute to enable nexthop address tracking. Nexthop address tracking is an event-driven notification system that monitors the status of routes installed in the Routing Information Base (RIB) and reports nexthop changes that affect internal BGP (iBGP) or external BGP (eBGP) prefixes directly to the BGP process. This improves the overall BGP convergence time, by allowing BGP to respond rapidly to nexthop changes for routes installed in the RIB. If nexthop tracking is enabled after certain routes are learned, the registration of all nexthops for selected BGP routes is done after the nexthop tracking feature is enabled. If nexthop tracking is disabled, and if there are still some selected BGP routes, BGP de-registers the nexthops of all selected BGP routes from NSM.

Attribute Name: enable-nexthop-tracking

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </enable-nexthop-tracking><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

## Command Syntax

```
bgp nexthop-trigger enable
```

---

## Configure nexthop tracking delay

Use this attribute to set the delay time for nexthop address tracking. This attribute configures the delay interval between routing table walks for nexthop delay tracking, after which BGP does a routing table scan on receiving a nexthop change trigger from NSM. The time period determines how long BGP waits before it walks the full BGP table to determine which prefixes are affected by the nexthop changes, after it receives the trigger from NSM about one or more nexthop changes.

Attribute Name: nexthop-tracking-delay

Attribute Type: uint8

Default Value: 5

Attribute Range: 1-100

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      <nexthop-tracking-delay>1</nexthop-tracking-delay> <!-- operation="delete"-->
    </config>
  </global>
```

```
</bgp>
```

## Command Syntax

```
bgp nexthop-trigger delay <1-100>
```

---

## Configure enable rfc 1771 strict origin

Use this attribute to set the origin path attribute to IGP when the origin is a protocol such as RIP, OSPF, or ISIS as specified in RFC 1771. Otherwise, the origin is always set to incomplete which is the industry standard.

Attribute Name: enable-rfc-1771-strict-origin

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <config>
      </enable-rfc-1771-strict-origin><!-- operation="delete"-->
    </config>
  </global>
</bgp>
```

## Command Syntax

```
bgp rfc1771-strict
```

---

## Configure options

Use this attribute to enable all BGP troubleshooting functions. Use this attribute without any parameters to turn on normal bgp debug information.

Attribute Name: options

Attribute Type: bits (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-received|peer)

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <global>
    <debug>
      <config>
        <options>all</options> <!-- operation="delete"-->
      </config>
    </debug>
  </global>
</bgp>
```

## Command Syntax

```
debug bgp (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates
  out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-
  received|peer)
```

---

## restart bgp graceful

### Netconf RPC payload

```
<bgp-graceful-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp"/>
```

### Command Syntax

```
restart bgp graceful
```

---

## clear bgp statistics

### Netconf RPC payload

```
<clear-bgp-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp"/>
```

### Command Syntax

```
clear bgp statistics
```

---

## snmp restart bgp

### Netconf RPC payload

```
<bgp-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp"/>
```

### Command Syntax

```
snmp restart bgp
```

---

## debug bgp (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-received|peer)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-received|peer)

### Netconf RPC payload

```
<bgp-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">  
<terminal-debug-options>all</terminal-debug-options>  
</bgp-debug-on>
```

### Command Syntax

```
debug bgp (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates  
out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-  
received|peer)
```

---

## **no debug bgp (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-received|peer)**

Attribute Name: terminal-debug-options

Attribute Type: bits (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-received|peer)

### **Netconf RPC payload**

```
<bgp-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <terminal-debug-options>all</terminal-debug-options>
</bgp-debug-off>
```

### **Command Syntax**

```
no debug bgp (all|nht|nsm|fsm|events|filters|keepalives|updates in|updates
out|dampening|bfd|rib|normal|add-path|adj-out|route-scan|packet-send|packet-
received|peer)
```

---

## **no debug all bgp**

### **Netconf RPC payload**

```
<bgp-all-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp"/>
```

### **Command Syntax**

```
no debug all bgp
```

---

## **IPI-BGP-INSTANCE**

---

### **Configure no external fail over**

Use this attribute to reset a BGP session immediately, if the interface used for BGP connection goes down.

Attribute Name: no-external-fail-over

Attribute Type: uint8

### **Netconf edit-config payload**

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </no-external-fail-over><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
```



---

```
</bgp>
```

## Command Syntax

```
no bgp fast-external-failover
```

---

## Configure no best path tie break

Use this attribute to always select a preferred older route even when the `bestpathCompareRouterId` attribute is configured

Attribute Name: `no-best-path-tie-break`

Attribute Type: `uint8`

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </no-best-path-tie-break><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
no bgp bestpath tie-break-on-age
```

---

## Configure inbound route filter disable

Use this attribute to enable the MPLS (Multiprotocol Label Switching) VPN/BGP inbound route filter. This attribute is used to control the installation of routing information into the BGP table. When a router runs MPLS VPN/BGP PE, it exchanges routing information with a routing distinguisher. By default, routing information that does not match the configured routing distinguisher value is not installed. When the local box has two VRFs where each routing distinguisher value is 10:100 and 20:200, routing information with routing distinguisher 10:200 is not installed into BGP table.

Attribute Name: `inbound-route-filter-disable`

Attribute Type: `uint8`

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </inbound-route-filter-disable><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
no bgp inbound-route-filter
```

---

## Configure external route leak disable

Use this attribute to disable external route leak.

Attribute Name: external-route-leak-disable

Attribute Type: uint8

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </external-route-leak-disable><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
no bgp external-route-leak
```

---

## Configure no client route reflection

Use this attribute to configure routers as route reflectors. Route reflectors are used when all Interior Border Gateway Protocol (iBGP) speakers are not fully meshed. If the clients are fully meshed the route reflector is not required

Attribute Name: no-client-route-reflection

Attribute Type: uint8

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </no-client-route-reflection><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
no bgp client-to-client reflection
```

---

## Configure med type

Use this attribute to specify two MED (Multi Exit Discriminator) attributes, confed and missing-as-worst. The confed attribute enables MED comparison along paths learned from confederation peers. The MEDs are compared only if there is no external Autonomous System (an AS not within the confederation) in the path. If there is an external autonomous system in the path, the MED comparison is not made. The missing-as-worst to consider a missing MED attribute in a path as having a value of infinity, making the path without a MED value the least desirable path. If missing-as-worst is disabled, the missing MED is assigned the value of 0, making the path with the missing MED attribute the best path.

Attribute Name: med-type

Attribute Type: bits (confed|missing-as-worst|remove-recv-med|remove-send-med)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <med-type>3</med-type> <!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
bgp bestpath med (confed) missing-as-worst
```

---

## Configure bgp as

Use this attribute to specify two MED (Multi Exit Discriminator) attributes, confed and missing-as-worst. The confed attribute enables MED comparison along paths learned from confederation peers. The MEDs are compared only if there is no external Autonomous System (an AS not within the confederation) in the path. If there is an external autonomous system in the path, the MED comparison is not made. The missing-as-worst to consider a missing MED attribute in a path as having a value of infinity, making the path without a MED value the least desirable path. If missing-as-worst is disabled, the missing MED is assigned the value of 0, making the path with the missing MED attribute the best path.

Attribute Name: med-type

Attribute Type: bits (confed|missing-as-worst|remove-recv-med|remove-send-med)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
```

```

    <config>
      <bgp-as>1</bgp-as>
    </config>
    <med-type>3</med-type> <!-- operation="delete"-->
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp bestpath med (missing-as-worst) confed
```

---

## Configure router id

Use this attribute to manually configure a fixed router ID as a BGP router identifier. When this attribute is used to configure a fixed router ID, the current router identifier is overridden and the peers are reset.

Attribute Name: router-id

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
bgp router-id A.B.C.D
```

---

## Configure cluster id

Use this attribute to configure the cluster ID if the BGP cluster has more than one route reflector. A cluster includes route reflectors and its clients. Usually, each cluster is identified by the router ID of its single route reflector but to increase redundancy sometimes a cluster may have more than one route reflector. All router reflectors in such a cluster are then identified by a cluster ID. The clusterId attribute is used to configure the 4 byte cluster ID for clusters with more than one route reflectors in an IPv4 address format.

Attribute Name: cluster-id

Attribute Type: union

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>

```

```

    <bgp-as>1</bgp-as>
  </config>
</bgp>

```

### Command Syntax

```
bgp cluster-id (A.B.C.D|<1-4294967295>)
```

---

## Configure local preference

Use this attribute to change the default local preference value. Local preference indicates the preferred path when there are multiple paths to the same destination. The path having a higher preference is preferred. The preference is sent to all routers and access servers in the local autonomous system.

Attribute Name: local-preference

Attribute Type: uint32

Default Value: 100

Attribute Range: 0-4294967295

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <local-preference>0</local-preference> <!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>

```

### Command Syntax

```
bgp default local-preference <0-4294967295>
```

---

## Configure graceful shutdown capable

Use this attribute to enable the graceful shutdown capability at the router level and make available the graceful-shutdown related attributes at the router and BGP neighbor levels.

Attribute Name: graceful-shutdown-capable

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```

```

<bgp-instances>
<bgp-instance>
  <bgp-as>1</bgp-as>
  <config>
    <bgp-as>1</bgp-as>
  </config>
  </graceful-shutdown-capable><!-- operation="delete"-->
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
bgp g-shut-capable
```

---

## Configure graceful shutdown

Use this attribute to gracefully shut down all BGP IPv4 sessions under this router. The BGP graceful shutdown feature reduces packet loss during maintenance activity.

Attribute Name: graceful-shutdown

Attribute Type: empty

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
<bgp-instance>
  <bgp-as>1</bgp-as>
  <config>
    <bgp-as>1</bgp-as>
  </config>
  </graceful-shutdown><!-- operation="delete"-->
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
bgp g-shut
```

---

## Configure graceful shutdown local preference

Use this attribute to set the local preference of the router to use during graceful shutdown. The local preference value indicates the preferred path when there are multiple paths to the same destination in a single routing database. The path with a higher preference value is the preferred one. The preferred path is sent to all routers and access servers in the local autonomous system.

Attribute Name: graceful-shutdown-local-preference

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <graceful-shutdown-local-preference>0</graceful-shutdown-local-preference>
<!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
bgp g-shut-local-preference <0-4294967295>
```

---

**Configure log neighbor changes**

Use this attribute to enable logging of status change messages without turning on debug bgp attributes. Product has many logging services for neighbor status, including debug bgp fsm and debug bgp events. However, these attributes cause system performance degradation. If you need to log neighbor status changes only, IP Infusion Inc. recommends turning off all debug attributes and using the setLogNbrChanges attribute instead.

Attribute Name: log-neighbor-changes

Attribute Type: empty

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </log-neighbor-changes><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
bgp log-neighbor-changes
```

---

**Configure scan interval**

Use this attribute to configure scanning intervals of BGP routers. This interval is the period after which router checks the validity of the routes in its database. To disable BGP scanning, set the scan-time interval to 0 seconds.

Attribute Name: scan-interval

Attribute Type: uint32

Default Value: 60

Attribute Range: 0-60

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <scan-interval>0</scan-interval> <!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp scan-time <0-60>
```

---

## Configure best path dont compare originator

Use this attribute to change the default bestpath selection by not comparing an originator-ID for an identical EBGp path

Attribute Name: best-path-dont-compare-originator

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </best-path-dont-compare-originator><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp bestpath dont-compare-originator-id
```

---

## Configure enable deterministic med

Use this attribute to compare the Multi Exit Discriminator (MED) variable when choosing among routes advertised by different peers in the same autonomous system. MED is compared after BGP attributes weight, local preference, AS-path and origin have been compared and are equal. For a correct comparison result, enable this attribute on all routers in a local AS. After enabling this attribute, all paths for the same prefix are grouped together and arranged according to their MED value. Based on this comparison, the best path is then chosen. This attribute compares MED variable when choosing routes advertised by different peers in the same AS, to compare MED, when choosing routes from neighbors



in different ASs use the compareMed attribute. When the deterministicMed attribute is set, routes from the same AS are grouped together, and the best routes of each group are compared.

Attribute Name: enable-deterministic-med

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </enable-deterministic-med><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp deterministic-med
```

---

## Configure enforce first as for ebgp

Use this attribute to enforce the first AS for eBGP routes. This attribute specifies that any updates received from an external neighbor that do not have the neighbors configured Autonomous System (AS) at the beginning of the AS\_PATH in the received update must be denied. Enabling this feature adds to the security of the BGP network by not allowing traffic from unauthorized systems.

Attribute Name: enforce-first-as-for-ebgp

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </enforce-first-as-for-ebgp><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp enforce-first-as
```

---

## Configure local as count

Use this attribute to set the number of times the local-AS (Autonomous System) is to be prepended.

Attribute Name: local-as-count

Attribute Type: uint8

Attribute Range: 2-64

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <local-as-count>2</local-as-count> <!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp as-local-count <2-64>
```

---

## Configure multi path relax

Use this attribute to relax the same AS-Path requirement so any candidate eBGP AS-Path with the same AS-path length might be used for eBGP load-balancing. This feature does not load-balance between eBGP and iBGP paths. Normally eBGP load-balancing requires the candidate routes to be equal-cost paths with identical BGP attributes having the same weight, Local-Pref, AS-Path (both the AS numbers and the AS pathlength), origin, MED, and different next-hop.

Attribute Name: multi-path-relax

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </multi-path-relax><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp bestpath as-path multipath-relax
```

---

## Configure ignore aigp for bestpath

Use this config to ignore aigp attr in BGP best-path selection algorithm.

Attribute Name: ignore-aigp-for-bestpath

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      </ignore-aigp-for-bestpath><!-- operation="delete"-->
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp bestpath aigp ignore
```

---

## Configure identifier

Use this attribute to specify a BGP confederation identifier

Attribute Name: identifier

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <confederation>
        <config>
          <identifier>1</identifier> <!-- operation="delete"-->
        </config>
      </confederation>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp confederation identifier <1-4294967295>
```

---

## Configure peer as number

Use this attribute to specify peer AS number in BGP confederation

Attribute Name: peer-as-number

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <confederation>
        <config>
          <peer-as-number>1</peer-as-number> <!-- operation="delete"-->
        </config>
      </confederation>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp confederation peers .<1-4294967295>
```

---

## Configure enable graceful restart

Use this attribute to enable BGP graceful-restart capabilities. The restart-time parameter is used for setting the maximum time that a graceful-restart neighbor waits to come back up after a restart. This value is applied to all neighbors unless you explicitly override it by configuring the corresponding value on the neighbor. The stalepath-time parameter is used to set the maximum time to preserve stale paths from a gracefully restarted neighbor. All stalepaths, unless reinstated by the neighbor after a re-establishment, will be deleted at the expiration of this timer.

Attribute Name: enable-graceful-restart

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <graceful-restart>
        <config>
          </enable-graceful-restart><!-- operation="delete"-->
        </config>
      </graceful-restart>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

    </config>
  </graceful-restart>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp graceful-restart
```

---

## Configure restart time

Use this attribute to enable BGP graceful-restart capabilities. The restart-time parameter is used for setting the maximum time that a graceful-restart neighbor waits to come back up after a restart. This value is applied to all neighbors unless you explicitly override it by configuring the corresponding value on the neighbor.

Attribute Name: restart-time

Attribute Type: uint32

Default Value: 90

Attribute Range: 1-3600

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <graceful-restart>
        <config>
          <restart-time>1</restart-time> <!-- operation="delete"-->
        </config>
      </graceful-restart>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
bgp graceful-restart restart-time <1-3600>
```

---

## Configure stale path max retention time

Use this attribute to enable BGP graceful-restart capabilities. The stalepath-time parameter is used to set the maximum time to preserve stale paths from a gracefully restarted neighbor. All stalepaths, unless reinstated by the neighbor after a re-establishment, will be deleted at the expiration of this timer.

Attribute Name: stale-path-max-retention-time

Attribute Type: uint32

Default Value: 360

Attribute Range: 1-3600

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <graceful-restart>
        <config>
          <stale-path-max-retention-time>1</stale-path-max-retention-time> <!--
operation="delete"-->
        </config>
      </graceful-restart>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp graceful-restart stalepath-time <1-3600>
```

## Configure route selection max defer time

Use this attribute to specify the update-delay value for a graceful-restart capable router. The update-delay value is the maximum time a graceful-restart capable router, which is restarting, will defer route-selection and advertisements to all its graceful-restart capable neighbors. This maximum time starts from the instance the first neighbor attains established state after restart. The restarting router prematurely terminates this timer when end-of-rib markers are received from all its graceful-restart capable neighbors.

Attribute Name: route-selection-max-defer-time

Attribute Type: uint32

Default Value: 120

Attribute Range: 1-3600

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <graceful-restart>
        <config>
          <route-selection-max-defer-time>1</route-selection-max-defer-time> <!--
operation="delete"-->
        </config>
      </graceful-restart>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp update-delay <1-3600>
```

---

## Configure graceful reset

Use this attribute to enable BGP graceful-restart capabilities. The restart-time parameter is used for setting the maximum time that a graceful-restart neighbor waits to come back up after a restart. This value is applied to all neighbors unless you explicitly override it by configuring the corresponding value on the neighbor.

Attribute Name: graceful-reset

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <graceful-restart>
        <config>
          </graceful-reset><!-- operation="delete"-->
        </config>
      </graceful-restart>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
bgp graceful-restart graceful-reset
```

---

## Configure keep alive

Use this attribute to globally set or reset the keepalive values for all the neighbors

Attribute Name: keep-alive

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: hold-time

Attribute Type: uint16

Attribute Range: 0-65535

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <timers>
        <config>
          <hold-time>0</hold-time>
          <keep-alive>0</keep-alive>
        </config>
      </timers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
timers bgp <0-65535> <0-65535>
```

---

**Configure always compare med**

Use this attribute to compare the Multi Exit Discriminator (MED) for paths from neighbors in different autonomous systems. Multi Exit Discriminator (MED) is used in best path selection by BGP. MED is compared after BGP attributes weight, local preference, AS-path and origin have been compared and are equal. MED comparison is done only among paths from the same autonomous system (AS). Use compareMed attribute to allow comparison of MEDs from different ASs. The MED parameter is used to select the best path. A path with lower MED is preferred.

Attribute Name: always-compare-med

Attribute Type: empty

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <route-selection>
        <config>
          </always-compare-med><!-- operation="delete"-->
        </config>
      </route-selection>
    </bgp-instance>
  </bgp-instances>
</bgp>

```



---

## Command Syntax

```
bgp always-compare-med
```

---

## Configure ignore as path length

Use this attribute to prevent the router from considering the autonomous system (AS) path length as a factor in the algorithm for choosing a best path route.

Attribute Name: ignore-as-path-length

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <route-selection>
        <config>
          </ignore-as-path-length><!-- operation="delete"-->
        </config>
      </route-selection>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
bgp bestpath as-path ignore
```

---

## Configure best path compare confed

Use this attribute to allow comparing of the confederation AS path length. This attribute specifies that the AS confederation path length must be used when available in the BGP best path decision process. It is effective only when bestpathAspath attribute has not been used.

Attribute Name: best-path-compare-confed

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <route-selection>
        <config>

```

```

        </best-path-compare-confed><!-- operation="delete"-->
    </config>
</route-selection>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp bestpath compare-confed-aspath
```

---

## Configure external compare router id

Use this attribute to compare router IDs for identical eBGP paths. When comparing similar routes from peers, the BGP router does not consider the router ID of the routes. By default, it selects the first received route. Use this attribute to include router ID in the selection process; similar routes are compared and the route with the lowest router ID is selected. The router ID is the highest IP address on the router, with preference given to loopback addresses. Router ID can be manually set by using the routerIpAddr attribute.

Attribute Name: external-compare-router-id

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <route-selection>
        <config>
          </external-compare-router-id><!-- operation="delete"-->
        </config>
      </route-selection>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
bgp bestpath compare-routerid
```

---

## Configure source ip prefix

Use this attribute to set the administrative distance for ip source prefix.

Attribute Name: source-ip-prefix

Attribute Type: string

Attribute Name: distance

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <administrative-distances>
        <administrative-distance> <!-- operation="delete"-->
          <source-ip-prefix>A.B.C.D/M</source-ip-prefix>
          <config>
            <source-ip-prefix>A.B.C.D/M</source-ip-prefix>
            <distance>1</distance>
          </config>
        </administrative-distance>
      </administrative-distances>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
distance <1-255> A.B.C.D/M
```

---

## Configure access list name

Use this attribute to define an administrative distance along with ip source prefix and access list name.

Attribute Name: access-list-name

Attribute Type: string

Attribute Name: distance

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <administrative-distances>
        <administrative-distance>
          <source-ip-prefix>A.B.C.D/M</source-ip-prefix>
          <config>
            <source-ip-prefix>A.B.C.D/M</source-ip-prefix>
```

```

        <distance>1</distance>
    </config>
    <access-list-name>WORD</access-list-name>
</administrative-distance>
</administrative-distances>
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
distance <1-255> A.B.C.D/M WORD
```

---

## IPI-BGP-ADDRESS-FAMILY

---

### Configure additional paths mode

Use this attribute to add additional paths in the BGP table

Attribute Name: additional-paths-mode

Attribute Type: bits (send-receive|receive|send)

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <afi>ipv4</afi>
            <additional-paths-mode>send-receive</additional-paths-mode> <!--
operation="delete"-->
          </address-family>
        </address-families>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

### Command Syntax

```
bgp additional-paths (send-receive|receive|send)
```

---

## Configure additional path select all

Use this attribute to select criteria to pick the paths

Attribute Name: additional-path-select-all

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          </additional-path-select-all><!-- operation="delete"-->
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp additional-paths select all
```

---

## Configure additional paths best select count

Use this attribute to select best N paths

Attribute Name: additional-paths-best-select-count

Attribute Type: uint8

Attribute Range: 2-3

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
```

```

    <address-family>
      <safi>unicast</safi>
      <config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <afi>ipv4</afi>
      <additional-paths-best-select-count>2</additional-paths-best-select-
count> <!-- operation="delete"-->
    </address-family>
  </address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp additional-paths select best <2-3>
```

---

## Configure no client route reflection

Use this attribute to configure routers as route reflectors. Route reflectors are used when all Interior Border Gateway Protocol (iBGP) speakers are not fully meshed. If the clients are fully meshed the route reflector is not required.

Attribute Name: no-client-route-reflection

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <afi>ipv4</afi>
            </no-client-route-reflection><!-- operation="delete"-->
          </address-family>
        </address-families>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

## Command Syntax

```
no bgp client-to-client reflection
```

---

## Configure enable auto summary

Use this attribute to enable sending summarized routes by a BGP speaker to its peers. Auto-summary is used by a BGP router to advertise summarized routes to its peers. Auto-summary can be enabled if certain routes have already been advertised: in this case, configuring auto-summary advertises the summarized routes first, then corresponding non-summarized routes are withdrawn. If certain routes have already been advertised, and auto-summary is disabled, non-summarized routes are first advertised, then the corresponding summarized routes are withdrawn from all the connected peers.

Attribute Name: enable-auto-summary

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          </enable-auto-summary><!-- operation="delete"-->
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
auto-summary
```

---

## Configure enable network igp sync

Use this attribute to enable IGP synchronization for BGP static network routes

Attribute Name: enable-network-igp-sync

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```

```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-families>
      <address-family>
        <safi>unicast</safi>
        <config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
        </enable-network-igp-sync><!-- operation="delete"-->
      </address-family>
    </address-families>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

network synchronization

---

## Configure map name

Use this attribute to enable or disable suppression/modification of incoming BGP updates to IP RIB/FIB table installation. In a dedicated route reflector, all the routes it receives may not be required to be stored or only few selected routes need to be stored, because it may not lie in the data path. Table maps are particularly useful to attain this restriction. When map-name attribute is set, the route map referenced in the map-name attribute shall be used to set certain properties (such as the traffic index) of the routes for installation into the RIB. The route is always downloaded, regardless of whether it is permitted or denied by the route map.

Attribute Name: map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>

```



```

        <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    <table-map>
    <config>
        <map-name>WORD</map-name>
    </config>
    </table-map>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
table-map WORD
```

---

## Configure table map filter

When tableMapFilter attribute is given in the table map attribute, the route map referenced is used to control whether a BGP route is to be downloaded to the IP RIB (hence the filter). A BGP route is not downloaded to the RIB if it is denied by the route map.

Attribute Name: table-map-filter

Attribute Type: boolean

Attribute Name: map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <table-map>
            <config>
              <map-name>WORD</map-name> <!-- operation="delete"-->

```

```

>
    <table-map-filter>true</table-map-filter> <!-- operation="delete"-->
</config>
</table-map>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
table-map WORD filter
```

## Configure enable igp sync

Use this attribute to enable IGP synchronization of Internal BGP (iBGP) learned routes with the Internal Gateway Protocol (IGP) system. Synchronization is used when a BGP router should not advertise routes learned from iBGP neighbors, unless those routes are also present in an IGP (for example, OSPF). Synchronization may be enabled when all the routers in an autonomous system do not speak BGP, and the autonomous system is a transit for other autonomous systems.

Attribute Name: enable-igp-sync

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          </enable-igp-sync><!-- operation="delete"-->
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
synchronization
```

---

## Configure backdoor

network address with backdoor for address family

Attribute Name: backdoor

Attribute Type: uint8

Attribute Name: network-rmap-name

Attribute Type: string

Default Value: NULL

Attribute Range: 1-63

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <network-lists>
            <network-list>
              <local-network-prefix>A.B.C.D</local-network-prefix>
              <config>
                <local-network-prefix>BGP_IP_NETWORK_T</local-network-prefix>
                <network-rmap-name>WORD</network-rmap-name>
              </config>
            </network-list>
          </network-lists>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
network (A.B.C.D | A.B.C.D/M) (route-map WORD|) (backdoor|)
```

## Configure bgp as

network address with backdoor for address family

Attribute Name: backdoor

Attribute Type: uint8

Attribute Name: network-rmap-name

Attribute Type: string

Default Value: NULL

Attribute Range: 1-63

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <network-lists>
            <network-list>
              <local-network-prefix>A.B.C.D</local-network-prefix>
              <config>
                <local-network-prefix>BGP_IP_NETWORK_T</local-network-prefix>
                <network-rmap-name>WORD</network-rmap-name>
              </config>
            </network-list>
          </network-lists>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
network (X:X::X:X/M) (route-map WORD|) (backdoor|)
```

---

## Configure aggregate address

Aggregates are used to minimize the size of routing tables. Aggregation combines the characteristics of several different routes and advertises a single route. The aggregate-address attribute creates an aggregate entry in the BGP routing table if any more-specific BGP routes are available in the specified range.

Attribute Name: aggregate-address

Attribute Type: union

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <aggregate-address-lists>
            <aggregate-address-list> <!-- operation="delete"-->
              <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
            <config>
              <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
            </config>
          </aggregate-address-list>
        </aggregate-address-lists>
      </address-family>
    </address-families>
  </bgp-instance>
</bgp-instances>
</bgp>
```

### Command Syntax

```
aggregate-address (A.B.C.D/M|A.B.C.D A.B.C.D|X:X::X:X/M)
```

---

## Configure aggregate type

The aggregate-type attribute creates an aggregate entry advertising the path for this route, consisting of all elements contained in all paths being summarized. Use this parameter to reduce the size of path information by listing the AS number only once, even if it was included in multiple paths that were aggregated.

Attribute Name: aggregate-type

Attribute Type: enum (as-set|summary-only|as-set-and-summary-only)

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-families>
    <address-family>
      <safi>unicast</safi>
      <config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <afi>ipv4</afi>
      <aggregate-address-lists>
      <aggregate-address-list>
        <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
        <config>
          <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
        </config>
        <aggregate-type>1</aggregate-type> <!-- operation="delete"-->
      </aggregate-address-list>
    </aggregate-address-lists>
  </address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

**Command Syntax**

```
aggregate-address as-set
```

**Configure afi**

The aggregate-type attribute creates an aggregate entry advertising the path for this route, consisting of all elements contained in all paths being summarized. Use this parameter to reduce the size of path information by listing the AS number only once, even if it was included in multiple paths that were aggregated.

Attribute Name: aggregate-type

Attribute Type: enum (as-set|summary-only|as-set-and-summary-only)

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

</config>
<address-families>
<address-family>
  <safi>unicast</safi>
  <config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <afi>ipv4</afi>
<aggregate-address-lists>
<aggregate-address-list>
  <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
  <config>
    <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
  </config>
  <aggregate-type>2</aggregate-type> <!-- operation="delete"-->
</aggregate-address-list>
</aggregate-address-lists>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
aggregate-address summary-only
```

## Configure safi

The aggregate-type attribute creates an aggregate entry advertising the path for this route, consisting of all elements contained in all paths being summarized. Use this parameter to reduce the size of path information by listing the AS number only once, even if it was included in multiple paths that were aggregated.

Attribute Name: aggregate-type

Attribute Type: enum (as-set|summary-only|as-set-and-summary-only)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
  <address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
  </address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

```

    </config>
    <afi>ipv4</afi>
    <aggregate-address-lists>
    <aggregate-address-list>
        <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
        <config>
            <aggregate-address>CML_IP_PREFIX_T</aggregate-address>
        </config>
        <aggregate-type>3</aggregate-type> <!-- operation="delete"-->
    </aggregate-address-list>
    </aggregate-address-lists>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
aggregate-address as-set summary-only
```

## Configure local

Use this attribute to define an administrative distance for local routes. Local routes are routes that is redistributed from another process. A distance is a rating of trustworthiness of a router. The higher the distance the lower the trust rating. If the administrative distance is changed, it could create inconsistency in the routing table and obstruct routing.

Attribute Name: local

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <distances>
            <distance> <!-- operation="delete"-->
              <local>1</local>
            </distance>
          </distances>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>

```



```

        <local>1</local>
        <ibgp>1</ibgp>
        <ebgp>1</ebgp>
    </config>
    <ibgp>1</ibgp>
    <ebgp>1</ebgp>
</distance>
</distances>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
distance bgp <1-255> <1-255> <1-255>
```

---

## Configure ebgp max path

Use this attribute to set the number of equal-cost multi-path (ECMP) routes for eBGP. You can install multiple BGP paths to the same destination to balance the load on the forwarding path

Attribute Name: ebgp-max-path

Attribute Type: int32

Attribute Range: 2-64

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <maximum-paths>
            <config>
              <ebgp-max-path>2</ebgp-max-path> <!-- operation="delete"-->
            </config>
          </maximum-paths>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```
</bgp-instances>
</bgp>
```

## Command Syntax

```
max-paths ebgp <2-64>
```

---

## Configure ibgp max path

Use this attribute to set the number of equal-cost multi-path (ECMP) routes for iBGP. You can install multiple BGP paths to the same destination to balance the load on the forwarding path.

Attribute Name: ibgp-max-path

Attribute Type: int32

Attribute Range: 2-64

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <maximum-paths>
            <config>
              <ibgp-max-path>2</ibgp-max-path> <!-- operation="delete"-->
            </config>
          </maximum-paths>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
max-paths ibgp <2-64>
```

---

## Configure eibgp max path

Use this attribute to set the number of equal-cost multi-path (ECMP) routes for eiBGP. You can install multiple BGP paths to the same destination to balance the load on the forwarding path

Attribute Name: eibgp-max-path

Attribute Type: int32

Attribute Range: 2-64

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <maximum-paths>
            <config>
              <eibgp-max-path>2</eibgp-max-path> <!-- operation="delete"-->
            </config>
          </maximum-paths>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
max-paths eibgp <2-64>
```

---

## Configure enable dampening

This attribute enable BGP route dampening and set various parameters to default values.

Attribute Name: enable-dampening

Attribute Type: enum (enable-dampening)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

<address-families>
<address-family>
  <safi>unicast</safi>
  <config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <afi>ipv4</afi>
</route-flap-dampenings>
<route-flap-dampening> <!-- operation="delete"-->
  <enable-dampening>enable-dampening</enable-dampening>
  <config>
    <enable-dampening>enable-dampening</enable-dampening>
  </config>
</route-flap-dampening>
</route-flap-dampenings>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening
```

---

## Configure reach half life

Use this attribute to configure reachability half-life time for the penalty in minutes for the bgp route dampening. The time for the penalty to decrease to one-half of its current value.

Attribute Name: reach-half-life

Attribute Type: uint32

Default Value: 15

Attribute Range: 1-45

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-families>
    <address-family>
      <safi>unicast</safi>
      <config>
        <safi>unicast</safi>
        <afi>ipv4</afi>

```

```

    </config>
    <afi>ipv4</afi>
    <route-flap-dampenings>
    <route-flap-dampening>
        <enable-dampening>enable-dampening</enable-dampening>
        <config>
            <enable-dampening>enable-dampening</enable-dampening>
        </config>
        <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
    </route-flap-dampening>
    </route-flap-dampenings>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening <1-45>
```

---

## Configure max suppress time

Use this attribute to configure the value to start suppressing a route for BGP route dampening. When the penalty for a route exceeds the suppress value, the route is suppressed

Attribute Name: max-suppress-time

Attribute Type: uint32

Attribute Range: 1-255

Attribute Name: reach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reuse-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: suppress-penalty

Attribute Type: uint32

Attribute Range: 1-20000

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

<address-families>
<address-family>
  <safi>unicast</safi>
  <config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <afi>ipv4</afi>
</route-flap-dampenings>
<route-flap-dampening>
  <enable-dampening>enable-dampening</enable-dampening>
  <config>
    <enable-dampening>enable-dampening</enable-dampening>
    <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
    <reuse-penalty>1</reuse-penalty> <!-- operation="delete"-->
    <suppress-penalty>1</suppress-penalty> <!-- operation="delete"-->
  </config>
  <max-suppress-time>1</max-suppress-time> <!-- operation="delete"-->
</route-flap-dampening>
</route-flap-dampenings>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening <1-45> <1-20000> <1-20000> <1-255>
```

## Configure reuse penalty

Use this attribute to configure the value to start suppressing a route for BGP route dampening. When the penalty for a route exceeds the suppress value, the route is suppressed

Attribute Name: max-suppress-time

Attribute Type: uint32

Attribute Range: 1-255

Attribute Name: reach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reuse-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: suppress-penalty

Attribute Type: uint32

Attribute Range: 1-20000

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <route-flap-dampenings>
            <route-flap-dampening>
              <enable-dampening>enable-dampening</enable-dampening>
              <config>
                <enable-dampening>enable-dampening</enable-dampening>
                <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
                <reuse-penalty>1</reuse-penalty> <!-- operation="delete"-->
                <suppress-penalty>1</suppress-penalty> <!-- operation="delete"-->
              </config>
                <max-suppress-time>1</max-suppress-time> <!-- operation="delete"-->
            </route-flap-dampening>
          </route-flap-dampenings>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
bgp dampening <1-45> <1-20000> <1-20000> <1-255>
```

**Configure unreachable half life**

Use this attribute to configure un-reachability half-life time for the penalty in minutes for bgp route dampening. The dampening information is purged from the router once the penalty becomes less than half of the reuse limit.

Attribute Name: unreachable-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reuse-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: suppress-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: max-suppress-time

Attribute Type: uint32

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <route-flap-dampenings>
            <route-flap-dampening>
              <enable-dampening>enable-dampening</enable-dampening>
              <config>
                <enable-dampening>enable-dampening</enable-dampening>
                <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
                <reuse-penalty>1</reuse-penalty> <!-- operation="delete"-->
                <suppress-penalty>1</suppress-penalty> <!-- operation="delete"-->
                <max-suppress-time>1</max-suppress-time> <!-- operation="delete"-->
              </config>
                <unreach-half-life>1</unreach-half-life> <!-- operation="delete"-->
            </route-flap-dampening>
          </route-flap-dampenings>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp dampening <1-45> <1-20000> <1-20000> <1-255> <1-45>
```



## Configure suppress penalty

Use this attribute to configure un-reachability half-life time for the penalty in minutes for bgp route dampening. The dampening information is purged from the router once the penalty becomes less than half of the reuse limit.

Attribute Name: unreach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reuse-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: suppress-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: max-suppress-time

Attribute Type: uint32

Attribute Range: 1-255

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
        </address-family>
      </address-families>
      <route-flap-dampenings>
        <route-flap-dampening>
          <enable-dampening>enable-dampening</enable-dampening>
          <config>
            <enable-dampening>enable-dampening</enable-dampening>
            <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
            <reuse-penalty>1</reuse-penalty> <!-- operation="delete"-->
            <suppress-penalty>1</suppress-penalty> <!-- operation="delete"-->
          </config>
        </route-flap-dampening>
      </route-flap-dampenings>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

        <max-suppress-time>1</max-suppress-time> <!-- operation="delete"-->
    </config>
    <unreach-half-life>1</unreach-half-life> <!-- operation="delete"-->
</route-flap-dampening>
</route-flap-dampenings>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening <1-45> <1-20000> <1-20000> <1-255> <1-45>
```

## Configure dampening rmap name

Use this attribute to configure route map to specify criteria for dampening.

Attribute Name: dampening-rmap-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <route-flap-dampenings>
            <route-flap-dampening>
              <enable-dampening>enable-dampening</enable-dampening>
              <config>
                <enable-dampening>enable-dampening</enable-dampening>
              </config>
              <dampening-rmap-name>WORD</dampening-rmap-name> <!--
operation="delete"-->
            </route-flap-dampening>
          </route-flap-dampenings>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening route-map WORD
```

---

## Configure protocol type

Use this attribute to inject routes from one routing process into another. Redistribution is used by routing protocols to advertise routes that are learned by some other means, such as by another routing protocol or by static routes. Since all internal routes are dumped into BGP, careful filtering is applied to make sure that only routes to be advertised reach the internet, not everything. This attribute allows redistribution by injecting prefixes from one routing protocol into another routing protocol.

Attribute Name: protocol-type

Attribute Type: enum (kernel|connected|static|rip|ospf|isis|connected-host-routes)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-families>
    <address-family>
      <safi>unicast</safi>
      <config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <afi>ipv4</afi>
      <route-redistribute-lists>
      <route-redistribute-list> <!-- operation="delete"-->
        <protocol-type>kernel</protocol-type>
        <config>
          <protocol-type>kernel</protocol-type>
        </config>
      </route-redistribute-list>
    </route-redistribute-lists>
    </address-family>
  </address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
redistribute (kernel|connected|static|rip|ospf|isis|connected-host-routes)
```

---

## Configure redist route map name

Use this attribute to configure route map to be used for redistributed routes.

Attribute Name: redist-route-map-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
          <route-redistribute-lists>
            <route-redistribute-list>
              <protocol-type>kernel</protocol-type>
              <config>
                <protocol-type>kernel</protocol-type>
              </config>
              <redist-route-map-name>WORD</redist-route-map-name> <!--
operation="delete"-->
            </route-redistribute-list>
          </route-redistribute-lists>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
redistribute (kernel|connected|static|rip|ospf|isis|connected-host-routes) route-
map WORD
```

---

## Configure afi

Use this attribute to start a BGP process.

Attribute Name: bgp-as

Attribute Type: uint32

Attribute Name: afi

Attribute Type: enum (ipv4|ipv6|vpn4|vpn6|rtfilter|l2vpn|link-state)

Attribute Name: safi

Attribute Type: enum (unicast|multicast|labeled-unicast|l2vpn-vpls|evpn|link-state|vpn-unicast|rtfilter-unicast|flowspec|flowspec-mpls-vpn)

Attribute Name: ospf-instance-number

Attribute Type: union

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance> <!-- operation="delete"-->
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-families>
        <address-family>
          <afi>ipv4</afi>
          <safi>unicast</safi>
          <bgp-redistributes-ospf>
            <bgp-redistribute-ospf>
              <ospf-instance-number>""</ospf-instance-number>
            </bgp-redistribute-ospf>
          </bgp-redistributes-ospf>
        </address-family>
      </address-families>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
redistribute (ospf) (WORD|<1-65535>)
```

---

## Configure redistribute ospf route map

Use this attribute to specify route map to redistribute routes from OSPF into BGP.

Attribute Name: redistribute-ospf-route-map

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
```

```

        <bgp-as>1</bgp-as>
    </config>
    <address-families>
    <address-family>
        <safi>unicast</safi>
        <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
    <bgp-redistributes-ospf>
    <bgp-redistribute-ospf>
        <ospf-instance-number>""</ospf-instance-number>
        <config>
            <ospf-instance-number>""</ospf-instance-number>
        </config>
        <redistribute-ospf-route-map>WORD</redistribute-ospf-route-map> <!--
- operation="delete"-->
    </bgp-redistribute-ospf>
    </bgp-redistributes-ospf>
</address-family>
</address-families>
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
redistribute (ospf) route-map WORD
```

## clear ip bgp (A.B.C.D|X:X::X:X|WORD) (description LINE|)

Attribute Name: arg

Attribute Type: union

Attribute Name: peer-reset-description

Attribute Type: string

Attribute Range: 1-255

### Netconf RPC payload

```

<ipi-bgp-address-family_clear-ip-bgp-peer xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-bgp">
    <arg>A.B.C.D|X:X::X:X</arg>
    <peer-reset-description>1</peer-reset-description>
</ipi-bgp-address-family_clear-ip-bgp-peer>

```

### Command Syntax

```
clear ip bgp (A.B.C.D|X:X::X:X|WORD) (description LINE|)
```

---

## IPI-BGP-PEER-GROUP

---

### Configure optional as

Use this attribute to specify optional AS number of BGP dynamic peer-group

Attribute Name: optional-as

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <optional-as-lists>
            <optional-as-list> <!-- operation="delete"-->
              <optional-as>1</optional-as>
              <config>
                <optional-as>1</optional-as>
              </config>
            </optional-as-list>
          </optional-as-lists>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD optional-as <1-4294967295>
```

---

### Configure peer group tag

Creates a peer-group group. Neighbors with the same update policies are grouped into peer-group groups. This facilitates the updates of various policies, such as distribute and filter lists. The peer-group group is then configured easily with any of the neighbor attributes. Any changes made to the peer-group group affect all members.

Attribute Name: peer-group-tag

Attribute Type: string

Attribute Name: peer-group-range

Attribute Type: union

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group> <!-- operation="delete"-->
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
            <peer-group-range>0</peer-group-range>
          </config>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD peer-group
```

---

## Configure bgp as

Creates a peer-group group. Neighbors with the same update policies are grouped into peer-group groups. This facilitates the updates of various policies, such as distribute and filter lists. The peer-group group is then configured easily with any of the neighbor attributes. Any changes made to the peer-group group affect all members.

Attribute Name: peer-group-tag

Attribute Type: string

Attribute Name: peer-group-range

Attribute Type: union

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group> <!-- operation="delete"-->
```



```

    <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
    <peer-group-range>A.B.C.D/M</peer-group-range>
  </config>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor WORD peer-group range A.B.C.D/M
```

## Configure peer group range

Creates a peer-group group. Neighbors with the same update policies are grouped into peer-group groups. This facilitates the updates of various policies, such as distribute and filter lists. The peer-group group is then configured easily with any of the neighbor attributes. Any changes made to the peer-group group affect all members.

Attribute Name: peer-group-tag

Attribute Type: string

Attribute Name: peer-group-range

Attribute Type: union

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group> <!-- operation="delete"-->
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
            <peer-group-range>X:X::X:X/M</peer-group-range>
          </config>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor WORD peer-group range X:X::X:X/M
```

---

## Configure group limit

This attribute specifies maximum number of peer-groups in a dynamic peer-group

Attribute Name: group-limit

Attribute Type: uint8

Attribute Range: 1-200

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <group-limit>1</group-limit> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD limit <1-200>
```

---

## Configure enable peer bfd

Enable bidirectional forwarding detection (BFD) for the BGP peer-group

Attribute Name: enable-peer-bfd

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
```

```

        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        </enable-peer-bfd><!-- operation="delete"-->
    </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor WORD fall-over bfd
```

---

## Configure enable peer bfd multihop

Enable bidirectional forwarding detection (BFD) for the BGP peer-group with multihop

Attribute Name: enable-peer-bfd-multihop

Attribute Type: uint8

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          </enable-peer-bfd-multihop><!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor WORD fall-over bfd multihop
```

---

## Configure auth key encrypt

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <bgp-passwords>
            <bgp-password>
              <password>WORD</password>
              <config>
                <password>WORD</password>
              </config>
              <auth-key-encrypt>1</auth-key-encrypt>
            </bgp-password>
          </bgp-passwords>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD authentication-key (0|1) WORD
```

**Configure password**

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>

```

```

    <config>
      <peer-group-tag>WORD</peer-group-tag>
    </config>
    <bgp-passwords>
    <bgp-password>
      <password>WORD</password>
      <config>
        <password>WORD</password>
      </config>
      <auth-key-encrypt>2</auth-key-encrypt>
    </bgp-password>
  </bgp-passwords>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD authentication-key WORD
```

---

## Configure additional paths mode

Adds additional paths in the BGP table

Attribute Name: additional-paths-mode

Attribute Type: bits (send-receive|receive|send|disable)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <address-families>
        <address-family>
          <safi>unicast</safi>
          <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <afi>ipv4</afi>
        </address-family>
      </address-families>
    </peer-group>
  </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <additional-paths-mode>send-receive</additional-paths-mode> <!--
operation="delete"-->
        </address-family>
    </address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD additional-paths (send-receive|receive|send|disable)
```

---

## Configure additional path select all

Attribute to select advertise additional path

Attribute Name: additional-path-select-all

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </additional-path-select-all><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD advertise additional-paths all
```

## Configure additional paths best select count

Attribute to select best advertise additional path

Attribute Name: additional-paths-best-select-count

Attribute Type: uint8

Attribute Range: 2-3

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <additional-paths-best-select-count>2</additional-paths-best-
select-count> <!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD advertise additional-paths best <2-3>
```

---

## Configure activate

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
            </address-families>
          </peer-group>
        </peer-groups>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor WORD activate
```

---

## Configure afi

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8



**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </activate><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD activate
```

**Configure safi**

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

<peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  <address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    </activate><!-- operation="delete"-->
  </address-family>
</address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD activate
```

---

## Configure default peer route map name

This attribute allows a BGP local router to send the default route 0.0.0.0 to a neighbor for use as a default route for specified address-family.

Attribute Name: default-peer-route-map-name

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <address-families>
      <address-family>

```

```

        <safi>unicast</safi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
</config>
    <afi>ipv4</afi>
    </default-peer-route-map-name><!-- operation="delete"-->
</address-family>
</address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD default-originate
```

---

## Configure peer route map orig name

This attribute configures route map to be used for a BGP local router to send the default route 0.0.0.0 to a neighbor for use as a default route for specified address-family. This attribute can be used with standard or extended access lists.

Attribute Name: peer-route-map-orig-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <peer-route-map-orig-name>WORD</peer-route-map-orig-name> <!--
operation="delete"-->
        </address-family>
    </address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD default-originate route-map WORD
```

## Configure weight

This attribute specifies a weight value, for specified address-family, to all routes learned from a neighbor for specified address-family. The route with the highest weight gets preference when the same prefix is learned from more than one peer. Unlike the local-preference attribute, the weight attribute is relevant only to the local router. When the weight is set for a peer group, all members of the peer group get the same weight. This attribute can also be used to assign a different weight to an individual peer-group member. When an individually-configured weight of a peer-group member is removed, its weight is reset to its peer groups weight.

Attribute Name: weight

Attribute Type: uint16

Default Value: 0

Attribute Range: 0-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <weight>0</weight> <!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        </address-family>
    </address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD weight <0-65535>
```

---

## Configure route server client

This attribute configures a neighbor as the route server client for specified address-family.

Attribute Name: route-server-client

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </route-server-client><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD route-server-client
```

---

## Configure next hop self

This attribute configure the router as the next hop for a BGP-speaking neighbor or peer-group group. This attribute allows a BGP router to change the nexthop information that is sent to the iBGP peer-group. The nexthop information is set to the IP address of the interface used to communicate with the neighbor.

Attribute Name: next-hop-self

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </next-hop-self><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD next-hop-self
```

---

## Configure peer route reflector

This attribute configures the router as a BGP route reflector and configure the specified neighbor as its client for specified address-family. Route reflectors are a solution for the explosion of iBGP peering within an autonomous

system. By route reflection the number of iBGP peers within an AS is reduced. Use this attribute to configure the local router as the route reflector and specify neighbors as its client. An AS can have more than one route reflector. One route reflector treats the other route reflector as another iBGP speaker.

Attribute Name: peer-route-reflector

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </peer-route-reflector><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD route-reflector-client
```

## Configure peer remove private as

This attribute removes the private Autonomous System (AS) number from outbound updates. Private AS numbers are not advertised to the Internet. This attribute is used with external BGP peers only. The router removes the AS numbers only if the update includes private AS numbers. If the update includes both private and public AS numbers, the system treats it as an error.

Attribute Name: peer-remove-private-as

Attribute Type: uint8

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <address-families>
      <address-family>
        <safi>unicast</safi>
        <config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
        </peer-remove-private-as><!-- operation="delete"-->
      </address-family>
    </address-families>
  </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD remove-private-AS
```

**Configure no send community**

This attribute specifies if a community attribute should be sent to a BGP neighbor for specified address-family. The community attribute groups destinations in a certain community and applies routing decisions according to those communities. By default, both standard and extended community attributes are sent to a neighbor

Attribute Name: no-send-community

Attribute Type: uint8

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
  </bgp-instance>
</bgp-instances>
</bgp>

```



```

</config>
<peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  <address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    </no-send-community><!-- operation="delete"-->
  </address-family>
</address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
no neighbor WORD send-community
```

---

## Configure no send community type

This attribute specifies the type of community attribute to be sent to a BGP neighbor.

Attribute Name: no-send-community-type

Attribute Type: bits (both|standard|extended|large)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <address-families>
        <address-family>

```

```

        <safi>unicast</safi>
        <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
        <no-send-community-type>both</no-send-community-type> <!--
operation="delete"-->
        </address-family>
    </address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
no neighbor WORD send-community (both|standard|extended|large)
```

## Configure neighbor attribute unchanged

This attribute advertises unchanged BGP AS path, next hop and med to the specified neighbor.

Attribute Name: neighbor-attribute-unchanged

Attribute Type: bits (as-path|next-hop|med)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <neighbor-attribute-unchanged>14</neighbor-attribute-unchanged> <!--
- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    </address-families>
  </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD attribute-unchanged
```

## Configure orf prefix capability

This attribute enables Outbound Router Filtering (ORF), and advertise the ORF capability to its neighbors. The ORFs send and receive capabilities to lessen the number of updates exchanged between neighbors. By filtering updates, this option minimizes generating and processing of updates. The two routers exchange updates to maintain the ORF for each router.

Attribute Name: orf-prefix-capability

Attribute Type: bits (both|receive|send)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <orf-prefix-capability>both</orf-prefix-capability> <!--
operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD capability orf prefix-list (both|receive|send)
```

---

## Configure peer allow ebgp vpn

This attribute allows an eBGP neighbor to be a VPN peer. By default, BGP VPN functionality is allowed only for iBGP peers. Using the peer-allow-ebgp-vpn attribute allows the VPN connection to be established to an eBGP peer.

Attribute Name: peer-allow-ebgp-vpn

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </peer-allow-ebgp-vpn><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD allow-ebgp-vpn
```

---

## Configure allow as number

This attribute advertises prefixes (routes) even when the source of the prefixes is from the same Autonomous System (AS) number for specified address-family. Use this attribute in a scenario where two routers at different locations use the same Autonomous System number and are connected via an ISP. Once prefixes arrive from one branch at the ISP,

they are tagged with the customers AS number. By default, when the ISP passes the prefixes to the other router, the prefixes are dropped if the other router uses the same AS number. Use this attribute to advertise the prefixes at the other side. Control the number of times an AS number is advertised by specifying a number. In a hub and spoke configuration in a VPN, a PE (Provider Edge) router advertises all prefixes containing duplicate AS numbers. Use this attribute to configure two VRFs on each PE router to receive and advertise prefixes. One of the VRFs receives prefixes with AS numbers from all PE routers and then advertises them to neighboring PE routers. The other VRF receives prefixes with AS numbers from the CE (Customer Edge) router and advertises them to all PE routers in the hub and spoke configuration.

Attribute Name: allow-as-number

Attribute Type: uint32

Default Value: 3

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <allow-as-number>1</allow-as-number> <!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD allowas-in <1-10>
```

---

## Configure capability graceful restart

This attribute configures the router to advertise the Graceful Restart Capability to the neighbors. This configuration indicates that the BGP speaker has the ability to preserve its forwarding state for the address family when BGP restarts. Use this attribute to advertise to the neighbor routers the capability of graceful restart.

Attribute Name: capability-graceful-restart

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </capability-graceful-restart><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD capability graceful-restart
```

---

## Configure prefix count

Use this attribute to specify maximum number of prefixes that can be received from a neighbor

Attribute Name: prefix-count

Attribute Type: uint32

Attribute Range: 1-4294967295

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <maximum-prefixes>
                <maximum-prefix> <!-- operation="delete"-->
                  <prefix-count>1</prefix-count>
                  <config>
                    <prefix-count>1</prefix-count>
                  </config>
                </maximum-prefix>
              </maximum-prefixes>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD maximum-prefix <1-4294967295>
```

**Configure stop update**

Stop installing the routes when limit is exceeded.

Attribute Name: stop-update

Attribute Type: uint8

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">

```

```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <address-families>
          <address-family>
            <safi>unicast</safi>
            <config>
              <safi>unicast</safi>
              <afi>ipv4</afi>
            </config>
            <afi>ipv4</afi>
            <maximum-prefixes>
              <maximum-prefix>
                <prefix-count>1</prefix-count>
                <config>
                  <prefix-count>1</prefix-count>
                </config>
              </stop-update>
            </maximum-prefix>
          </maximum-prefixes>
        </address-family>
      </address-families>
    </peer-group>
  </peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> stop-update
```

## Configure maximum prefix warning

This attribute when enabled only give warning message when limit is exceeded. When it is not set and extra prefixes are received, the router ends the peering.

Attribute Name: maximum-prefix-warning

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```



```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <address-families>
          <address-family>
            <safi>unicast</safi>
            <config>
              <safi>unicast</safi>
              <afi>ipv4</afi>
            </config>
            <afi>ipv4</afi>
            <maximum-prefixes>
              <maximum-prefix>
                <prefix-count>1</prefix-count>
                <config>
                  <prefix-count>1</prefix-count>
                </config>
              </maximum-prefix-warning>
            </maximum-prefix>
          </maximum-prefixes>
        </address-family>
      </address-families>
    </peer-group>
  </peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> warning-only
```

## Configure threshold percentage

Threshold-value in percen. This attribute controls the number of prefixes that can be received from a neighbor. This attribute allows the configuration of a specified number of prefixes that a BGP router is allowed to receive from a neighbor. When the maximum-prefix-warning attribute is not set and extra prefixes are received, the router ends the peering.

Attribute Name: threshold-percentage

Attribute Type: uint8

Default Value: 75

Attribute Range: 1-100

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <maximum-prefixes>
                <maximum-prefix>
                  <prefix-count>1</prefix-count>
                  <config>
                    <prefix-count>1</prefix-count>
                  </config>
                  <threshold-percentage>1</threshold-percentage>
                </maximum-prefix>
              </maximum-prefixes>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> <1-100>
```

### Configure warning only

Throw warning if exceeds threshold-value

Attribute Name: warning-only

Attribute Type: uint8

Attribute Name: threshold-percentage

Attribute Type: uint8

Default Value: 75

Attribute Range: 1-100

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <maximum-prefixes>
            <maximum-prefix>
              <prefix-count>1</prefix-count>
              <config>
                <prefix-count>1</prefix-count>
                <threshold-percentage>1</threshold-percentage>
              </config>
            </maximum-prefix>
          </maximum-prefixes>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> <1-100> warning-only
```

---

## Configure unsuppress route map name

unsuppress map name. This attribute is used to selectively leak more-specific routes to a particular neighbor.

Attribute Name: unsuppress-route-map-name

Attribute Type: string

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <unsuppress-route-map-name>WORD</unsuppress-route-map-name> <!--
operation="delete"-->
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD unsuppress-map WORD
```

---

## Configure access list identifier

Access List information

Attribute Name: access-list-identifier

Attribute Type: string

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <distribute-list-filters>
                <distribute-list-filter>
                  <filter-direction>in</filter-direction>
                  <config>
                    <filter-direction>in</filter-direction>
                  </config>
                  <access-list-identifier>WORD</access-list-identifier>
                </distribute-list-filter>
              </distribute-list-filters>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD distribute-list WORD (in|out)
```

**Configure safi**

Use this attribute to start a BGP process.

Attribute Name: bgp-as

Attribute Type: uint32

Attribute Name: afi

Attribute Type: enum (ipv4|ipv6|vpnv4|vpnv6|rtfilter|l2vpn|link-state)

Attribute Name: safi

Attribute Type: enum (unicast|multicast|labeled-unicast|l2vpn-vpls|evpn|link-state|vpn-unicast|rtfilter-unicast|flowspec|flowspec-mpls-vpn)

Attribute Name: peer-group-tag

Attribute Type: string

Attribute Range: 1-255

Attribute Name: prefix-list-name

Attribute Type: string

Attribute Name: prefix-filter-direction

Attribute Type: enum (in|out)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance> <!-- operation="delete"-->
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <address-families>
            <address-family>
              <afi>ipv4</afi>
              <safi>unicast</safi>
              <peer-group-tag>WORD</peer-group-tag>
              <prefix-list-filters>
                <prefix-list-filter>
                  <config>
                    <prefix-list-name>WORD</prefix-list-name>
                    <prefix-filter-direction>in</prefix-filter-direction>
                  </config>
                </prefix-list-filter>
              </prefix-list-filters>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD prefix-list WORD (in|out)
```

## Configure as access list identifier

Access-list number. This attribute sets a BGP filter. This attribute specifies an access list filter on updates based on the BGP autonomous system paths. Each filter is an access list based on regular expressions

Attribute Name: as-access-list-identifier

Attribute Type: string

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <as-list-filters>
                <as-list-filter>
                  <as-list-direction>in</as-list-direction>
                  <config>
                    <as-list-direction>in</as-list-direction>
                  </config>
                  <as-access-list-identifier>WORD</as-access-list-identifier>
                </as-list-filter>
              </as-list-filters>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD filter-list WORD (in|out)
```

## Configure route map name

Use this attribute to apply a route map to incoming or outgoing routes. This attribute filters updates and modifies attributes. A route map is applied to inbound or outbound updates. Only the routes that pass the route map are sent or accepted in updates.

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <route-map-filters>
                <route-map-filter>
                  <route-map-direction>in</route-map-direction>
                  <config>
                    <route-map-direction>in</route-map-direction>
                  </config>
                  <route-map-name>WORD</route-map-name>
                </route-map-filter>
              </route-map-filters>
            </address-family>
          </address-families>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```



## Command Syntax

```
neighbor WORD route-map WORD (in|out)
```

---

## Configure peer as

Autonomous system number of a neighbor. If the specified ASN matches the ASN number specified in the router bgp global configuration, the neighbor is identified as internal. If the ASN does no match, it is identified as external to the local AS.

Attribute Name: peer-as

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <peer-as>1</peer-as> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD remote-as <1-4294967295>
```

---

## Configure graceful shut

Use this attribute to start a graceful shutdown for the BGP session of the specified BGP neighbor. The BGP session for this neighbor is shut down after the graceful shutdown timer expires. If there is no alternate path available for traffic to flow prior the actual shutdown of the BGP session, this path is made available for 60 seconds or for configured time after which the path is no longer available and traffic is dropped.

Attribute Name: graceful-shut

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
```

```

    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        </graceful-shut><!-- operation="delete"-->
      </peer-group>
    </peer-groups>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD g-shut
```

---

## Configure graceful shutdown timer

Configure the value of the graceful shutdown timer. After the timer expires, the BGP session initiated for graceful shutdown is shut down.

Attribute Name: graceful-shutdown-timer

Attribute Type: uint32

Attribute Range: 10-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <graceful-shutdown-timer>10</graceful-shutdown-timer> <!--
operation="delete"-->
      </peer-group>
    </peer-groups>
  </bgp-instance>
</bgp-instances>

```

---

```
</bgp>
```

## Command Syntax

```
neighbor WORD g-shut-timer <10-65535>
```

---

## Configure peer restart time

Sets a different restart-time other than the global restart-time. This attribute takes precedence over the restart-time value specified using the grstSet attribute. The restart-time value is the maximum time that a graceful-restart neighbor waits to come back up after a restart. The default value is 120 seconds.

Attribute Name: peer-restart-time

Attribute Type: uint32

Attribute Range: 1-3600

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <peer-restart-time>1</peer-restart-time> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD restart-time <1-3600>
```

---

## Configure peer description

Associates a description with a neighbor. This helps in identifying a neighbor quickly. It is useful for an ISP that has multiple neighbor relationships.

Attribute Name: peer-description

Attribute Type: string

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
```

```

    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <peer-description>LINE</peer-description> <!-- operation="delete"-->
      </peer-group>
    </peer-groups>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD description LINE
```

## Configure peer connect interval

This attribute sets the timers for a specific BGP neighbor. Keepalive messages are sent by a router to inform another router that the BGP connection between the two is still active. The keepalive interval is the period of time between each keepalive message sent by the router. The holdtime interval is the time the router waits to receive a keepalive message and if it does not receive a message for this period it declares the neighbor dead.

Attribute Name: peer-connect-interval

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <peer-connect-interval>1</peer-connect-interval> <!--
operation="delete"-->
      </peer-group>
    </peer-groups>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

    </peer-groups>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD timers connect <1-65535>
```

---

## Configure peer as origin interval

Configures the minimum interval between the sending of AS-origination routing updates.

Attribute Name: peer-as-origin-interval

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <peer-as-origin-interval>1</peer-as-origin-interval> <!--
operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD as-origination-interval <1-65535>
```

---

## Configure min route advertisement interval

Sets a minimum route advertisement interval between the sending of BGP routing updates. To reduce the flapping of routes to internet, a minimum advertisement interval is set, so that the BGP routing updates are sent only per interval seconds.

Attribute Name: min-route-advertisement-interval

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-65535

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <min-route-advertisement-interval>0</min-route-advertisement-interval>
        <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD advertisement-interval <0-65535>
```

## Configure enable dynamic capability

Use this attribute to enable the dynamic capability for a specific peer-group. This attribute allows a BGP speaker to advertise or withdraw an address family capability to a peer-group in a non-disruptive manner.

Attribute Name: enable-dynamic-capability

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

        </enable-dynamic-capability><!-- operation="delete"-->
    </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD capability dynamic
```

---

## Configure collide established

Include a neighbor already in an established state for conflict resolution when a TCP connection collision is detected.

Attribute Name: collide-established

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <collide-established><!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD collide-established
```

---

## Configure source identifier

Allows internal BGP sessions to use any operational interface for TCP connections. This attribute can be used in conjunction with any specified interface on the router. The loopback interface is the interface that is most commonly used with this attribute. The use of loopback interface eliminates a dependency and BGP does not have to rely on the availability of a particular interface for making TCP connections.

Attribute Name: source-identifier

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <source-identifier>WORD</source-identifier> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD update-source WORD
```

---

## Configure enforce multi hop

Turns on the enforcement of eBGP neighbors perform multihop.

Attribute Name: enforce-multi-hop

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
            </enforce-multi-hop><!-- operation="delete"-->
          </config>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```



```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD enforce-multihop
```

---

## Configure neighbor override capability

Override a capability negotiation result and use locally configured values.

Attribute Name: neighbor-override-capability

Attribute Type: empty

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          </neighbor-override-capability><!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD override-capability
```

---

## Configure neighbor strict capability match

Close the BGP connection if capability value does not match the remote peer-group.

Attribute Name: neighbor-strict-capability-match

Attribute Type: empty

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>

```

```

<config>
  <bgp-as>1</bgp-as>
</config>
<peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  </neighbor-strict-capability-match><!-- operation="delete"-->
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD strict-capability-match
```

---

## Configure disallow infinite hold time

Disallow configuration of infinite hold-time. A hold-time of 0 seconds from the peer-group (during exchange of open messages) or the user (during configuration) will be rejected.

Attribute Name: disallow-infinite-hold-time

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      </disallow-infinite-hold-time><!-- operation="delete"-->
    </peer-group>
  </peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD disallow-infinite-holdtime
```

---

## Configure disable capability negotiation

Disable the capability negotiation. It allows compatibility with older BGP versions that have no capability parameters used in open messages between peer-groups.

Attribute Name: disable-capability-negotiation

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          </disable-capability-negotiation><!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD dont-capability-negotiate
```

---

## Configure neighbor passive

Sets a BGP neighbor as passive.

Attribute Name: neighbor-passive

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
```

```

    <config>
      <peer-group-tag>WORD</peer-group-tag>
    </config>
    </neighbor-passive><!-- operation="delete"-->
  </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD passive
```

## Configure peer shutdown description

Use this attribute to send shutdown communication message to inform peer the reason for the shutdown of the BGP session.

Attribute Name: peer-shutdown-description

Attribute Type: string

Attribute Range: 1-255

Attribute Name: peer-shutdown

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
            </peer-shutdown><!-- operation="delete"-->
          </config>
          <peer-shutdown-description>1</peer-shutdown-description> <!--
operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD shutdown (description LINE|)
```

---

## Configure peer port

Sets the BGP port number of a neighbor.

Attribute Name: peer-port

Attribute Type: uint16

Default Value: 179

Attribute Range: 0-65535

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <peer-port>0</peer-port> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD port <0-65535>
```

---

## Configure bgp version

Configure router to accept only a particular BGP version. By default, the system uses BGP version 4 and on request dynamically negotiates down to version 2. Disables the routers version-negotiation capability and forces the router to use only a specified version with the neighbor.

Attribute Name: bgp-version

Attribute Type: uint8

Default Value: 4

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
```

```

        <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        <bgp-version>(4)</bgp-version> <!-- operation="delete"-->
    </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor WORD version (4)
```

---

## Configure enable ext opt param len

Use this attribute for a specific peer to encode extended optional parameter length.

Attribute Name: enable-ext-opt-param-len

Attribute Type: empty

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        </enable-ext-opt-param-len><!-- operation="delete"-->
      </peer-group>
    </peer-groups>
  </bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor WORD extended-optional-param
```

---

## Configure tcp adjust mss

Use this attribute to set the BGP TCP MSS value of a neighbor.

Attribute Name: tcp-adjust-mss

Attribute Type: uint16

Attribute Range: 40-1440

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <tcp-adjust-mss>40</tcp-adjust-mss> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD tcp-mss <40-1440>
```

---

## Configure keep alive

Use this attribute to globally set or reset the keepalive values for all the neighbors

Attribute Name: keep-alive

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: hold-time

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
```

```

<config>
  <bgp-as>1</bgp-as>
</config>
<peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  <timers>
  <config>
    <hold-time>0</hold-time>
    <keep-alive>0</keep-alive>
  </config>
</timers>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD timers <0-65535> <0-65535>
```

---

## Configure enabled

Use this attribute to accept and attempt BGP connections to external peers on indirectly connected networks. Multihop is not established if the only route to the multihop peer is a default route. This avoids loop formation.

Attribute Name: enabled

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <ebgp-multihop>
      <config>
        </enabled>
      </config>
    </peer-group>
  </peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```



```

    </ebgp-multihop>
  </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD ebgp-multihop
```

---

## Configure maximum hop count

Use this attribute to accept and attempt BGP connections to external peers on indirectly connected networks. Multihop is not established if the only route to the multihop peer is a default route. This avoids loop formation.

Attribute Name: enabled

Attribute Type: empty

Attribute Name: maximum-hop-count

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <ebgp-multihop>
            <config>
              <maximum-hop-count>1</maximum-hop-count> <!-- operation="delete"-->
              </enabled><!-- operation="delete"-->
            </config>
          </ebgp-multihop>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD ebgp-multihop <1-255>
```

---

## Configure peer local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <local-as>
            <local-as-list> <!-- operation="delete"-->
              <peer-local-as>1</peer-local-as>
            <config>
              <peer-local-as>1</peer-local-as>
            </config>
            </local-as-list>
          </local-as>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD local-as <1-4294967295>
```

---

## Configure no prepend local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

Attribute Name: no-prepend-local-as

Attribute Type: empty

Attribute Name: replace-local-as

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <local-as>
            <local-as-list>
              <peer-local-as>1</peer-local-as>
              <config>
                <peer-local-as>1</peer-local-as>
                </no-prepend-local-as>
                </replace-local-as>
              </config>
            </local-as-list>
          </local-as>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD local-as <1-4294967295> (no-prepend|) (replace-as|)
```

---

## Configure admin status

Enable or disable AIGP

Attribute Name: admin-status

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

</config>
<peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  <address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
  <aigp>
  <config>
    <admin-status>disable</admin-status> <!-- operation="delete"-->
  </config>
</aigp>
</address-family>
</address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD aigp (disable|enable)
```

---

## Configure aigp send med

Enable AIGP send multi exit discriminator.

Attribute Name: aigp-send-med

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
  <peer-groups>
  <peer-group>
    <peer-group-tag>WORD</peer-group-tag>
    <config>

```

```

        <peer-group-tag>WORD</peer-group-tag>
    </config>
    <address-families>
    <address-family>
        <safi>unicast</safi>
        <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
    </address-family>
    </address-families>
    </peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD aigp send med
```

---

## Configure send cost community id

Send AIGP value in Cost community. And get the Community ID.

Attribute Name: send-cost-community-id

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: point-of-insertion

Attribute Type: enum (pre-bestpath|igp-cost)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>

```

```

    </config>
    <address-families>
    <address-family>
        <safi>unicast</safi>
        <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
    </address-family>
    </address-families>
    <peer-group>
    <peer-groups>
    </peer-groups>
    </peer-group>
    </bgp-instance>
    </bgp-instances>
    </bgp>

```

## Command Syntax

```
neighbor WORD aigp send cost-community <0-255> poi (pre-bestpath|igp-cost)
```

## Configure enable transitive

Send AIGP value in Cost community and Enable Transitive Cost Community

Attribute Name: enable-transitive

Attribute Type: uint8

Attribute Name: send-cost-community-id

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: point-of-insertion

Attribute Type: enum (pre-bestpath|igp-cost)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <address-families>
      <address-family>
        <safi>unicast</safi>
        <config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
      <aigp>
      <cost-community>
      <config>
        <send-cost-community-id>0</send-cost-community-id> <!--
operation="delete"-->
        <point-of-insertion>pre-bestpath</point-of-insertion> <!--
operation="delete"-->
        </enable-transitive><!-- operation="delete"-->
      </config>
    </cost-community>
  </aigp>
</address-family>
</address-families>
</peer-group>
</peer-groups>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD aigp send cost-community <0-255> poi (pre-bestpath|igp-cost)
transitive
```

---

## clear bgp peer-group WORD l2vpn evpn soft (out|in|)

Attribute Name: peer-group-tag

Attribute Type: string

Attribute Range: 1-255

Attribute Name: soft-reconfig

Attribute Type: enum (out|in|soft-only)

## Netconf RPC payload

```

<ipi-bgp-peer-group_clear-peer-group-l2vpn-evpn-soft-all xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <peer-group-tag>WORD</peer-group-tag>

```

```
<soft-reconfig>soft-only</soft-reconfig>
</ipi-bgp-peer-group_clear-peer-group-l2vpn-evpn-soft-all>
```

## Command Syntax

```
clear bgp peer-group WORD l2vpn evpn soft (out|in|)
```

---

# IPI-BGP-PEER

---

## Configure enable peer bfd

Enable bidirectional forwarding detection (BFD) for the BGP peer

Attribute Name: enable-peer-bfd

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </enable-peer-bfd><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) fall-over bfd
```

---

## Configure bgp as

Enable bidirectional forwarding detection (BFD) for the BGP peer

Attribute Name: enable-peer-bfd

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```



```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peers>
      <peer>
        <peer-address>A.B.C.D|X:X::X:X</peer-address>
        <config>
          <peer-address>BGP_IP_ADDR_T</peer-address>
        </config>
        </enable-peer-bfd><!-- operation="delete"-->
      </peer>
    </peers>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD fall-over bfd
```

---

## Configure enable peer bfd multihop

Enable bidirectional forwarding detection (BFD) for the BGP peer with multihop

Attribute Name: enable-peer-bfd-multihop

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </enable-peer-bfd-multihop><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) fall-over bfd multihop
```

---

## Configure peer address

Enable bidirectional forwarding detection (BFD) for the BGP peer with multihop

Attribute Name: enable-peer-bfd-multihop

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </enable-peer-bfd-multihop><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD fall-over bfd multihop
```

---

## Configure interface name

Configure the interface name of a BGP neighbor.

Attribute Name: interface-name

Attribute Type: string

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
```

```

    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
      <interface-name>WORD</interface-name> <!-- operation="delete"-->
    </peer>
  </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) interface WORD
```

## Configure mapped peer group tag

Adds a neighbor to an existing peer group. Neighbors with the same update policies are grouped into peer groups. This facilitates the updates of various policies, such as distribute and filter lists. The peer group is then configured easily with any of the neighbor attributes. Any changes made to the peer group affect all members.

Attribute Name: mapped-peer-group-tag

Attribute Type: string

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <mapped-peer-group-tag>WORD</mapped-peer-group-tag> <!--
operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) peer-group WORD
```

---

## Configure tcp adjust mss

Use this attribute to set the BGP TCP MSS value of a neighbor.

Attribute Name: tcp-adjust-mss

Attribute Type: uint16

Attribute Range: 40-1440

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <tcp-adjust-mss>40</tcp-adjust-mss> <!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD tcp-mss <40-1440>
```

---

## Configure auth key encrypt

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
```

```

    <config>
      <peer-address>BGP_IP_ADDR_T</peer-address>
    </config>
  <bgp-passwords>
    <bgp-password>
      <password>WORD</password>
      <config>
        <password>WORD</password>
      </config>
      <auth-key-encrypt>1</auth-key-encrypt>
    </bgp-password>
  </bgp-passwords>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) authentication-key (0|1) WORD
```

---

## Configure password

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <bgp-passwords>
            <bgp-password>
              <password>WORD</password>
              <config>
                <password>WORD</password>
              </config>
              <auth-key-encrypt>2</auth-key-encrypt>
            </bgp-password>
          </bgp-passwords>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    </bgp-passwords>
  </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) authentication-key WORD
```

---

## Configure additional paths mode

Adds additional paths in the BGP table

Attribute Name: additional-paths-mode

Attribute Type: bits (send-receive|receive|send|disable)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
                <afi>ipv4</afi>
                <additional-paths-mode>send-receive</additional-paths-mode> <!--
operation="delete"-->
              </address-family>
            </address-families>
          </peer>
        </peers>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) additional-paths (send-receive|receive|send|disable)
```

---

## Configure additional path select all

Attribute to select advertise additional path

Attribute Name: additional-path-select-all

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
                <afi>ipv4</afi>
              </additional-path-select-all><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) advertise additional-paths all
```

---

## Configure additional paths best select count

Attribute to select best advertise additional path

Attribute Name: additional-paths-best-select-count

Attribute Type: uint8

Attribute Range: 2-3

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <additional-paths-best-select-count>2</additional-paths-best-
select-count> <!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) advertise additional-paths best <2-3>
```

## Configure activate

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
```



```

<config>
  <bgp-as>1</bgp-as>
</config>
<peers>
<peer>
  <peer-address>A.B.C.D|X:X::X:X</peer-address>
  <config>
    <peer-address>BGP_IP_ADDR_T</peer-address>
  </config>
  <address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    </activate><!-- operation="delete"-->
  </address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD activate
```

## Configure afi

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>

```

```

    </config>
    <address-families>
    <address-family>
        <safi>unicast</safi>
        <config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
        </activate><!-- operation="delete"-->
    </address-family>
    </address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD activate
```

## Configure safi

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <peers>
        <peer>
            <peer-address>A.B.C.D|X:X::X:X</peer-address>
            <config>
                <peer-address>BGP_IP_ADDR_T</peer-address>
            </config>
            <address-families>
            <address-family>
                <safi>unicast</safi>
                <config>
                    <safi>unicast</safi>
                    <afi>ipv4</afi>
                </config>
            </address-family>
            </address-families>
        </peer>
        </peers>
    </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <afi>ipv4</afi>
        </activate><!-- operation="delete"-->
    </address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) activate
```

## Configure de activate

Deactivate neighbor. This attribute disables the exchange of AF information with a neighboring router.

Attribute Name: de-activate

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </de-activate><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD de-activate
```

---

## Configure default peer route map name

This attribute allows a BGP local router to send the default route 0.0.0.0 to a neighbor for use as a default route for specified address-family.

Attribute Name: default-peer-route-map-name

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </default-peer-route-map-name><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) default-originate
```

---

## Configure peer route map orig name

This attribute configures route map to be used for a BGP local router to send the default route 0.0.0.0 to a neighbor for use as a default route for specified address-family. This attribute can be used with standard or extended access lists.

Attribute Name: peer-route-map-orig-name

Attribute Type: string

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <peer-route-map-orig-name>WORD</peer-route-map-orig-name> <!--
operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) default-originate route-map WORD
```

## Configure weight

This attribute specifies a weight value, for specified address-family, to all routes learned from a neighbor for specified address-family. The route with the highest weight gets preference when the same prefix is learned from more than one peer. Unlike the local-preference attribute, the weight attribute is relevant only to the local router. When the weight is set for a peer group, all members of the peer group get the same weight. This attribute can also be used to assign a different weight to an individual peer-group member. When an individually-configured weight of a peer-group member is removed, its weight is reset to its peer groups weight.

Attribute Name: weight

Attribute Type: uint16

Default Value: 0

Attribute Range: 0-65535

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <weight>0</weight> <!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) weight <0-65535>
```

---

## Configure route server client

This attribute configures a neighbor as the route server client for specified address-family.

Attribute Name: route-server-client

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
```

```

</config>
<peers>
<peer>
  <peer-address>A.B.C.D|X:X::X:X</peer-address>
  <config>
    <peer-address>BGP_IP_ADDR_T</peer-address>
  </config>
  <address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    </route-server-client><!-- operation="delete"-->
  </address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) route-server-client
```

## Configure next hop self

This attribute configure the router as the next hop for a BGP-speaking neighbor or peer group. This attribute allows a BGP router to change the nexthop information that is sent to the iBGP peer. The nexthop information is set to the IP address of the interface used to communicate with the neighbor.

Attribute Name: next-hop-self

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
    </peer>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

    <address-families>
    <address-family>
      <safi>unicast</safi>
      <config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <afi>ipv4</afi>
      </next-hop-self><!-- operation="delete"-->
    </address-family>
  </address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) next-hop-self
```

## Configure peer route reflector

This attribute configures the router as a BGP route reflector and configure the specified neighbor as its client for specified address-family. Route reflectors are a solution for the explosion of iBGP peering within an autonomous system. By route reflection the number of iBGP peers within an AS is reduced. Use this attribute to configure the local router as the route reflector and specify neighbors as its client. An AS can have more than one route reflector. One route reflector treats the other route reflector as another iBGP speaker.

Attribute Name: peer-route-reflector

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
      <address-families>
      <address-family>
        <safi>unicast</safi>
        <config>
          <safi>unicast</safi>

```



```

        <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    </peer-route-reflector><!-- operation="delete"-->
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) route-reflector-client
```

## Configure peer remove private as

This attribute removes the private Autonomous System (AS) number from outbound updates. Private AS numbers are not advertised to the Internet. This attribute is used with external BGP peers only. The router removes the AS numbers only if the update includes private AS numbers. If the update includes both private and public AS numbers, the system treats it as an error.

Attribute Name: peer-remove-private-as

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </peer-remove-private-as><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    </peer>
  </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) remove-private-AS
```

---

## Configure no send community

This attribute specifies if a community attribute should be sent to a BGP neighbor for specified address-family. The community attribute groups destinations in a certain community and applies routing decisions according to those communities. By default, both standard and extended community attributes are sent to a neighbor

Attribute Name: no-send-community

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              </no-send-community><!-- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
no neighbor (A.B.C.D|X:X::X:X) send-community
```

---

## Configure no send community type

This attribute specifies the type of community attribute to be sent to a BGP neighbor.

Attribute Name: no-send-community-type

Attribute Type: bits (both|standard|extended|large)

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <no-send-community-type>both</no-send-community-type> <!--
operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
no neighbor (A.B.C.D|X:X::X:X) send-community (both|standard|extended|large)
```

---

## Configure neighbor attribute unchanged

This attribute advertises unchanged BGP AS path, next hop and med to the specified neighbor.

Attribute Name: neighbor-attribute-unchanged

Attribute Type: bits (as-path|next-hop|med)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <neighbor-attribute-unchanged>14</neighbor-attribute-unchanged> <!--
- operation="delete"-->
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) attribute-unchanged
```

## Configure orf prefix capability

This attribute enables Outbound Router Filtering (ORF), and advertise the ORF capability to its neighbors. The ORFs send and receive capabilities to lessen the number of updates exchanged between neighbors. By filtering updates, this option minimizes generating and processing of updates. The two routers exchange updates to maintain the ORF for each router.

Attribute Name: orf-prefix-capability

Attribute Type: bits (both|receive|send)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
```

```

    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
                <afi>ipv4</afi>
                <orf-prefix-capability>both</orf-prefix-capability> <!--
operation="delete"-->
              </address-family>
            </address-families>
          </peer>
        </peers>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) capability orf prefix-list (both|receive|send)
```

## Configure peer allow ebgp vpn

This attribute allows an eBGP neighbor to be a VPN peer. By default, BGP VPN functionality is allowed only for iBGP peers. Using the peer-allow-ebgp-vpn attribute allows the VPN connection to be established to an eBGP peer.

Attribute Name: peer-allow-ebgp-vpn

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>

```

```

    <peer-address>A.B.C.D|X:X::X:X</peer-address>
  </config>
  <peer-address>BGP_IP_ADDR_T</peer-address>
</config>
<address-families>
  <address-family>
    <safi>unicast</safi>
    <config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <afi>ipv4</afi>
    </peer-allow-ebgp-vpn><!-- operation="delete"-->
  </address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) allow-ebgp-vpn
```

## Configure allow as number

This attribute advertises prefixes (routes) even when the source of the prefixes is from the same Autonomous System (AS) number for specified address-family. Use this attribute in a scenario where two routers at different locations use the same Autonomous System number and are connected via an ISP. Once prefixes arrive from one branch at the ISP, they are tagged with the customers AS number. By default, when the ISP passes the prefixes to the other router, the prefixes are dropped if the other router uses the same AS number. Use this attribute to advertise the prefixes at the other side. Control the number of times an AS number is advertised by specifying a number. In a hub and spoke configuration in a VPN, a PE (Provider Edge) router advertises all prefixes containing duplicate AS numbers. Use this attribute to configure two VRFs on each PE router to receive and advertise prefixes. One of the VRFs receives prefixes with AS numbers from all PE routers and then advertises them to neighboring PE routers. The other VRF receives prefixes with AS numbers from the CE (Customer Edge) router and advertises them to all PE routers in the hub and spoke configuration.

Attribute Name: allow-as-number

Attribute Type: uint32

Default Value: 3

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    <peers>
    <peer>
        <peer-address>A.B.C.D|X:X::X:X</peer-address>
        <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
        </config>
        <address-families>
        <address-family>
            <safi>unicast</safi>
            <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
            </config>
            <afi>ipv4</afi>
            <allow-as-number>1</allow-as-number> <!-- operation="delete"-->
        </address-family>
    </address-families>
    </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) allowas-in <1-10>
```

## Configure capability graceful restart

This attribute configures the router to advertise the Graceful Restart Capability to the neighbors. This configuration indicates that the BGP speaker has the ability to preserve its forwarding state for the address family when BGP restarts. Use this attribute to advertise to the neighbor routers the capability of graceful restart.

Attribute Name: capability-graceful-restart

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <peers>
        <peer>
            <peer-address>A.B.C.D|X:X::X:X</peer-address>
            <config>
                <peer-address>BGP_IP_ADDR_T</peer-address>
            </config>
        </peer>
    </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

```

    <address-family>
      <safi>unicast</safi>
      <config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <afi>ipv4</afi>
      </capability-graceful-restart><!-- operation="delete"-->
    </address-family>
  </address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) capability graceful-restart
```

## Configure extended nexthop encode

A BGP speaker that wishes to advertise an IPv6 next hop for IPv4 NLRI for VPN-IPv4 NLRI to a BGP peer as per this specification MUST use the Capability Advertisement procedures defined with the Extended Next Hop Encoding capability to determine whether its peer supports this for the NLRI AFI/SAFI pair(s) of interest.

Attribute Name: extended-nexthop-encode

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```



```

        </extended-nexthop-encode><!-- operation="delete"-->
    </address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) capability extended-nexthop-encode
```

## Configure prefix count

Use this attribute to specify maximum number of prefixes that can be received from a neighbor

Attribute Name: prefix-count

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
      <address-families>
      <address-family>
        <safi>unicast</safi>
        <config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <afi>ipv4</afi>
        <maximum-prefixes>
        <maximum-prefix> <!-- operation="delete"-->
          <prefix-count>1</prefix-count>
          <config>
            <prefix-count>1</prefix-count>
          </config>
        </maximum-prefix>
      </maximum-prefixes>
    </peer>
  </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

```

    </address-family>
  </address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) maximum-prefix <1-4294967295>
```

## Configure stop update

Stop installing the routes when limit is exceeded.

Attribute Name: stop-update

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <maximum-prefixes>
                <maximum-prefix>
                  <prefix-count>1</prefix-count>
                  <config>
                    <prefix-count>1</prefix-count>
                  </config>
                </stop-update>
              </maximum-prefix>
            </maximum-prefixes>
          </address-family>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    </address-families>
  </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) maximum-prefix <1-4294967295> stop-update
```

## Configure maximum prefix warning

This attribute when enabled only give warning message when limit is exceeded. When it is not set and extra prefixes are received, the router ends the peering.

Attribute Name: maximum-prefix-warning

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
              <maximum-prefixes>
                <maximum-prefix>
                  <prefix-count>1</prefix-count>
                </prefix-count>
              </maximum-prefix>
            </maximum-prefixes>
          </address-family>

```

```

    </address-families>
  </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) maximum-prefix <1-4294967295> warning-only
```

## Configure threshold percentage

Threshold-value in percen. This attribute controls the number of prefixes that can be received from a neighbor. This attribute allows the configuration of a specified number of prefixes that a BGP router is allowed to receive from a neighbor. When the maximum-prefix-warning attribute is not set and extra prefixes are received, the router ends the peering.

Attribute Name: threshold-percentage

Attribute Type: uint8

Default Value: 75

Attribute Range: 1-100

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <maximum-prefixes>
            <maximum-prefix>
              <prefix-count>1</prefix-count>
            </maximum-prefix>
          </maximum-prefixes>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <threshold-percentage>1</threshold-percentage>
    </maximum-prefix>
</maximum-prefixes>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) maximum-prefix <1-4294967295> <1-100>
```

## Configure warning only

Throw warning if exceeds threshold-value

Attribute Name: warning-only

Attribute Type: uint8

Attribute Name: threshold-percentage

Attribute Type: uint8

Default Value: 75

Attribute Range: 1-100

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <maximum-prefixes>
            <maximum-prefix>

```

```

        <prefix-count>1</prefix-count>
        <config>
            <prefix-count>1</prefix-count>
            <threshold-percentage>1</threshold-percentage>
        </config>
        </warning-only>
    </maximum-prefix>
</maximum-prefixes>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) maximum-prefix <1-4294967295> <1-100> warning-only
```

## Configure unsuppress route map name

unsuppress map name. This attribute is used to selectively leak more-specific routes to a particular neighbor.

Attribute Name: unsuppress-route-map-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <peers>
        <peer>
            <peer-address>A.B.C.D|X:X::X:X</peer-address>
            <config>
                <peer-address>BGP_IP_ADDR_T</peer-address>
            </config>
            <address-families>
            <address-family>
                <safi>unicast</safi>
                <config>
                    <safi>unicast</safi>
                    <afi>ipv4</afi>
                </config>
                <afi>ipv4</afi>
                <unsuppress-route-map-name>WORD</unsuppress-route-map-name> <!--
operation="delete"-->

```

```

        </address-family>
    </address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) unsuppress-map WORD
```

---

## Configure access list identifier

Access List information

Attribute Name: access-list-identifier

Attribute Type: string

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
            <distribute-list-filters>
              <distribute-list-filter>
                <filter-direction>in</filter-direction>
                <config>
                  <filter-direction>in</filter-direction>
                </config>
                <access-list-identifier>WORD</access-list-identifier>
              </distribute-list-filter>
            </distribute-list-filters>
          </peer>
        </peers>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

```

    </address-families>
  </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) distribute-list WORD (in|out)
```

---

## Configure filter direction

Access List information

Attribute Name: access-list-identifier

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <distribute-list-filters>
            <distribute-list-filter>
              <filter-direction>in</filter-direction>
              <config>
                <filter-direction>in</filter-direction>
              </config>
              <access-list-identifier>WORD</access-list-identifier>
            </distribute-list-filter>
          </distribute-list-filters>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```



```

</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD distribute-list WORD (in|out)
```

---

## Configure prefix list name

This attribute specifies a prefix list for filtering BGP advertisements for specified address-family. Filtering by prefix list matches the prefixes of routes with those listed in the prefix list. If there is a match, the route is used. An empty prefix list permits all prefixes. If a given prefix does not match any entries of a prefix list, the route is denied access. When multiple entries of a prefix list match a prefix, the entry with the smallest sequence number is considered to be a real match. The router begins the search at the top of the prefix list, with the sequence number 1. Once a match or deny occurs, the router does not need to go through the rest of the prefix list. For efficiency the most common matches or denials are listed at the top.

Attribute Name: prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <prefix-list-filters>
            <prefix-list-filter>
              <prefix-filter-direction>in</prefix-filter-direction>
              <config>
                <prefix-filter-direction>in</prefix-filter-direction>
              </config>
              <prefix-list-name>WORD</prefix-list-name>
            </prefix-list-filter>
          </prefix-list-filters>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        </prefix-list-filter>
    </prefix-list-filters>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) prefix-list WORD (in|out)
```

## Configure prefix filter direction

This attribute specifies a prefix list for filtering BGP advertisements for specified address-family. Filtering by prefix list matches the prefixes of routes with those listed in the prefix list. If there is a match, the route is used. An empty prefix list permits all prefixes. If a given prefix does not match any entries of a prefix list, the route is denied access. When multiple entries of a prefix list match a prefix, the entry with the smallest sequence number is considered to be a real match. The router begins the search at the top of the prefix list, with the sequence number 1. Once a match or deny occurs, the router does not need to go through the rest of the prefix list. For efficiency the most common matches or denies are listed at the top.

Attribute Name: prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            <prefix-list-filters>
              <prefix-list-filter>
                <prefix-filter-direction>in</prefix-filter-direction>
              </prefix-list-filter>
            </prefix-list-filters>
          </address-family>
        </address-families>
      </peer>
    </peers>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <config>
            <prefix-filter-direction>in</prefix-filter-direction>
        </config>
        <prefix-list-name>WORD</prefix-list-name>
    </prefix-list-filter>
</prefix-list-filters>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD prefix-list WORD (in|out)
```

---

## Configure as access list identifier

Access-list number. This attribute sets a BGP filter. This attribute specifies an access list filter on updates based on the BGP autonomous system paths. Each filter is an access list based on regular expressions

Attribute Name: as-access-list-identifier

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <as-list-filters>
            <as-list-filter>
              <as-list-direction>in</as-list-direction>
            </as-list-filter>
          </as-list-filters>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <config>
            <as-list-direction>in</as-list-direction>
        </config>
        <as-access-list-identifier>WORD</as-access-list-identifier>
    </as-list-filter>
</as-list-filters>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) filter-list WORD (in|out)
```

## Configure as list direction

Access-list number. This attribute sets a BGP filter. This attribute specifies an access list filter on updates based on the BGP autonomous system paths. Each filter is an access list based on regular expressions

Attribute Name: as-access-list-identifier

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <peers>
        <peer>
            <peer-address>A.B.C.D|X:X::X:X</peer-address>
            <config>
                <peer-address>BGP_IP_ADDR_T</peer-address>
            </config>
            <address-families>
            <address-family>
                <safi>unicast</safi>
                <config>
                    <safi>unicast</safi>
                    <afi>ipv4</afi>
                </config>
                <afi>ipv4</afi>
            <as-list-filters>
            <as-list-filter>
                <as-list-direction>in</as-list-direction>
            </as-list-filter>
            </as-list-filters>
        </address-family>
        </address-families>
        </peer>
        </peers>
    </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <config>
            <as-list-direction>in</as-list-direction>
        </config>
        <as-access-list-identifier>WORD</as-access-list-identifier>
    </as-list-filter>
</as-list-filters>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD filter-list WORD (in|out)
```

---

## Configure route map name

Use this attribute to apply a route map to incoming or outgoing routes. This attribute filters updates and modifies attributes. A route map is applied to inbound or outbound updates. Only the routes that pass the route map are sent or accepted in updates.

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <route-map-filter>
            <route-map-direction>in</route-map-direction>
            <config>
                <route-map-direction>in</route-map-direction>
            </config>
            <route-map-name>WORD</route-map-name>
        </route-map-filter>
    </route-map-filters>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) route-map WORD (in|out)
```

## Configure route map direction

Use this attribute to apply a route map to incoming or outgoing routes. This attribute filters updates and modifies attributes. A route map is applied to inbound or outbound updates. Only the routes that pass the route map are sent or accepted in updates.

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
            </address-family>
          </address-families>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <afi>ipv4</afi>
    <route-map-filters>
    <route-map-filter>
        <route-map-direction>in</route-map-direction>
        <config>
            <route-map-direction>in</route-map-direction>
        </config>
        <route-map-name>WORD</route-map-name>
    </route-map-filter>
</route-map-filters>
</address-family>
</address-families>
</peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD route-map WORD (in|out)
```

---

## Configure peer port

Sets the BGP port number of a neighbor.

Attribute Name: peer-port

Attribute Type: uint16

Default Value: 179

Attribute Range: 0-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <peer-port>0</peer-port> <!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>

```

---

```
</bgp>
```

## Command Syntax

```
neighbor WORD port <0-65535>
```

---

## Configure min route advertisement interval

Sets a minimum route advertisement interval between the sending of BGP routing updates. To reduce the flapping of routes to internet, a minimum advertisement interval is set, so that the BGP routing updates are sent only per interval seconds.

Attribute Name: min-route-advertisement-interval

Attribute Type: uint32

Attribute Range: 0-65535

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <min-route-advertisement-interval>0</min-route-advertisement-interval>
        <!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD advertisement-interval <0-65535>
```

---

## Configure peer as origin interval

Configures the minimum interval between the sending of AS-origination routing updates.

Attribute Name: peer-as-origin-interval

Attribute Type: uint32

Attribute Range: 1-65535



**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <peer-as-origin-interval>1</peer-as-origin-interval> <!--
operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD as-origination-interval <1-65535>
```

**Configure collide established**

Include a neighbor already in an established state for conflict resolution when a TCP connection collision is detected.

Attribute Name: collide-established

Attribute Type: empty

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </collide-established><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```
</bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD collide-established
```

---

## Configure peer description

Associates a description with a neighbor. This helps in identifying a neighbor quickly. It is useful for an ISP that has multiple neighbor relationships.

Attribute Name: peer-description

Attribute Type: string

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <peer-description>LINE</peer-description> <!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD description LINE
```

---

## Configure disallow infinite hold time

Disallow configuration of infinite hold-time. A hold-time of 0 seconds from the peer (during exchange of open messages) or the user (during configuration) will be rejected.

Attribute Name: disallow-infinite-hold-time

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
```

```

    <bgp-as>1</bgp-as>
  <config>
    <bgp-as>1</bgp-as>
  </config>
  <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
      </disallow-infinite-hold-time><!-- operation="delete"-->
    </peer>
  </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD disallow-infinite-holdtime
```

## Configure disable capability negotiation

Disable the capability negotiation. It allows compatibility with older BGP versions that have no capability parameters used in open messages between peers.

Attribute Name: disable-capability-negotiation

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </disable-capability-negotiation><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD dont-capability-negotiate
```

---

## Configure enforce multi hop

Turns on the enforcement of eBGP neighbors perform multihop.

Attribute Name: enforce-multi-hop

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </enforce-multi-hop><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD enforce-multihop
```

---

## Configure graceful shut

Use this attribute to start a graceful shutdown for the BGP session of the specified BGP neighbor. The BGP session for this neighbor is shut down after the graceful shutdown timer expires. If there is no alternate path available for traffic to flow prior the actual shutdown of the BGP session, this path is made available for 60 seconds or for configured time after which the path is no longer available and traffic is dropped.

Attribute Name: graceful-shut

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
```

```

        <bgp-as>1</bgp-as>
    </config>
    <peers>
    <peer>
        <peer-address>A.B.C.D|X:X::X:X</peer-address>
        <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
        </config>
        </graceful-shut><!-- operation="delete"-->
    </peer>
    </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD g-shut
```

## Configure graceful shutdown timer

Configure the value of the graceful shutdown timer. After the timer expires, the BGP session initiated for graceful shutdown is shut down.

Attribute Name: graceful-shutdown-timer

Attribute Type: uint32

Attribute Range: 10-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
      <peer>
        <peer-address>A.B.C.D|X:X::X:X</peer-address>
        <config>
          <peer-address>BGP_IP_ADDR_T</peer-address>
        </config>
        <graceful-shutdown-timer>10</graceful-shutdown-timer> <!--
operation="delete"-->
      </peer>
    </peers>
  </bgp-instance>
</bgp-instances>
</bgp>

```

---

## Command Syntax

```
neighbor WORD g-shut-timer <10-65535>
```

---

## Configure neighbor override capability

Override a capability negotiation result and use locally configured values.

Attribute Name: neighbor-override-capability

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          </neighbor-override-capability><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD override-capability
```

---

## Configure neighbor passive

Sets a BGP neighbor as passive.

Attribute Name: neighbor-passive

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
```

```

    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
    </neighbor-passive><!-- operation="delete"-->
  </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD passive
```

## Configure peer restart time

Sets a different restart-time other than the global restart-time. This attribute takes precedence over the restart-time value specified using the grstSet attribute. The restart-time value is the maximum time that a graceful-restart neighbor waits to come back up after a restart. The default value is 120 seconds.

Attribute Name: peer-restart-time

Attribute Type: uint32

Attribute Range: 1-3600

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <peer-restart-time>1</peer-restart-time> <!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD restart-time <1-3600>
```

---

## Configure peer shutdown

Disables a neighbor administratively. It will terminate any active session for a specified neighbor and clear all related routing information. In case a peer group is specified for shutdown, a large number of peering sessions could be terminated.

Attribute Name: peer-shutdown

Attribute Type: empty

Attribute Name: peer-shutdown-description

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
            <peer-shutdown-description>1</peer-shutdown-description> <!--
operation="delete"-->
          </config>
          </peer-shutdown><!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD shutdown (description LINE|)
```

---

## Configure neighbor strict capability match

Close the BGP connection if capability value does not match the remote peer.

Attribute Name: neighbor-strict-capability-match

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
```



```

    <bgp-as>1</bgp-as>
  <config>
    <bgp-as>1</bgp-as>
  </config>
  <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
      </neighbor-strict-capability-match><!-- operation="delete"-->
    </peer>
  </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD strict-capability-match
```

## Configure source identifier

Allows internal BGP sessions to use any operational interface for TCP connections. This attribute can be used in conjunction with any specified interface on the router. The loopback interface is the interface that is most commonly used with this attribute. The use of loopback interface eliminates a dependency and BGP does not have to rely on the availability of a particular interface for making TCP connections.

Attribute Name: source-identifier

Attribute Type: string

Default Value: NULL

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
            </config>
            <source-identifier>WORD</source-identifier> <!-- operation="delete"-->
          </peer>
        </peers>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

---

```
</bgp>
```

## Command Syntax

```
neighbor WORD update-source WORD
```

---

## Configure bgp version

Configure router to accept only a particular BGP version. By default, the system uses BGP version 4 and on request dynamically negotiates down to version 2. Disables the routers version-negotiation capability and forces the router to use only a specified version with the neighbor.

Attribute Name: bgp-version

Attribute Type: uint8

Default Value: 4

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <bgp-version>(4)</bgp-version> <!-- operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD version (4)
```

---

## Configure enable ext opt param len

Use this attribute for a specific peer to encode extended optional parameter length.

Attribute Name: enable-ext-opt-param-len

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
```

```

    <bgp-as>1</bgp-as>
  <config>
    <bgp-as>1</bgp-as>
  </config>
  <peers>
    <peer>
      <peer-address>A.B.C.D|X:X::X:X</peer-address>
      <config>
        <peer-address>BGP_IP_ADDR_T</peer-address>
      </config>
      </enable-ext-opt-param-len><!-- operation="delete"-->
    </peer>
  </peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD extended-optional-param
```

## Configure peer connect interval

This attribute sets the timers for a specific BGP neighbor. Keepalive messages are sent by a router to inform another router that the BGP connection between the two is still active. The keepalive interval is the period of time between each keepalive message sent by the router. The holdtime interval is the time the router waits to receive a keepalive message and if it does not receive a message for this period it declares the neighbor dead.

Attribute Name: peer-connect-interval

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <peer-connect-interval>1</peer-connect-interval> <!--
operation="delete"-->
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD timers connect <1-65535>
```

---

## Configure peer as

Autonomous system number of a neighbor. If the specified ASN matches the ASN number specified in the router bgp global configuration, the neighbor is identified as internal. If the ASN does no match, it is identified as external to the local AS.

Attribute Name: peer-as

Attribute Type: union

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <peer-as>-2</peer-as>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD remote-as internal
```

---

## Configure enable dynamic capability

Use this attribute to enable the dynamic capability for a specific peer. This attribute allows a BGP speaker to advertise or withdraw an address family capability to a peer in a non-disruptive manner.

Attribute Name: enable-dynamic-capability

Attribute Type: empty

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```

```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <peers>
      <peer>
        <peer-address>A.B.C.D|X:X::X:X</peer-address>
        <config>
          <peer-address>BGP_IP_ADDR_T</peer-address>
        </config>
        </enable-dynamic-capability><!-- operation="delete"-->
      </peer>
    </peers>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) capability dynamic
```

---

## Configure peer shutdown description

Use this attribute to send shutdown communication message to inform peer the reason for the shutdown of the BGP session.

Attribute Name: peer-shutdown-description

Attribute Type: string

Attribute Range: 1-255

Attribute Name: peer-shutdown

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
            </peer-shutdown><!-- operation="delete"-->
          </config>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <peer-shutdown-description>1</peer-shutdown-description> <!--
operation="delete"-->
    </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) shutdown (description LINE|)
```

## Configure hold time

Use this attribute to globally set or reset the holdtime values for all the neighbors.

Attribute Name: hold-time

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: keep-alive

Attribute Type: uint16

Attribute Range: 0-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <timers>
            <config>
              <keep-alive>0</keep-alive>
              <hold-time>0</hold-time>
            </config>
          </timers>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD timers <0-65535> <0-65535>
```

---

## Configure keep alive

Use this attribute to globally set or reset the keepalive values for all the neighbors

Attribute Name: keep-alive

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: hold-time

Attribute Type: uint16

Attribute Range: 0-65535

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <timers>
            <config>
              <hold-time>0</hold-time>
              <keep-alive>0</keep-alive>
            </config>
          </timers>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) timers <0-65535> <0-65535>
```

---

## Configure enabled

Use this attribute to accept and attempt BGP connections to external peers on indirectly connected networks. Multihop is not established if the only route to the multihop peer is a default route. This avoids loop formation.

Attribute Name: enabled

Attribute Type: empty

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <ebgp-multihop>
            <config>
              </enabled>
            </config>
          </ebgp-multihop>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) ebgp-multihop
```

---

## Configure maximum hop count

Use this attribute to accept and attempt BGP connections to external peers on indirectly connected networks. Multihop is not established if the only route to the multihop peer is a default route. This avoids loop formation.

Attribute Name: enabled

Attribute Type: empty

Attribute Name: maximum-hop-count

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>
```



```

    <peers>
    <peer>
        <peer-address>A.B.C.D|X:X::X:X</peer-address>
        <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
        </config>
        <ebgp-multihop>
        <config>
            <maximum-hop-count>1</maximum-hop-count> <!-- operation="delete"-->
            </enabled><!-- operation="delete"-->
        </config>
    </ebgp-multihop>
    </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) ebgp-multihop <1-255>
```

---

## Configure peer local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <peers>
        <peer>
            <peer-address>A.B.C.D|X:X::X:X</peer-address>
            <config>
                <peer-address>BGP_IP_ADDR_T</peer-address>
            </config>
            <local-as>
            <local-as-list> <!-- operation="delete"-->
                <peer-local-as>1</peer-local-as>
            <config>
                <peer-local-as>1</peer-local-as>
            </config>
            </local-as-list>

```

```

    </local-as>
  </peer>
</peers>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) local-as <1-4294967295>
```

---

## Configure no prepend local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

Attribute Name: no-prepend-local-as

Attribute Type: empty

Attribute Name: replace-local-as

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <local-as>
            <local-as-list>
              <peer-local-as>1</peer-local-as>
              <config>
                <peer-local-as>1</peer-local-as>
                </no-prepend-local-as>
                </replace-local-as>
              </config>
            </local-as-list>
          </local-as>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) local-as <1-4294967295> (no-prepend|) (replace-as|)
```

---

## Configure replace local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

Attribute Name: no-prepend-local-as

Attribute Type: empty

Attribute Name: replace-local-as

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <local-as>
            <local-as-list>
              <peer-local-as>1</peer-local-as>
              <config>
                <peer-local-as>1</peer-local-as>
                </no-prepend-local-as>
                </replace-local-as>
              </config>
            </local-as-list>
          </local-as>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD local-as <1-4294967295> (no-prepend|) (replace-as|)
```

---

## Configure admin status

Enable or disable AIGP

Attribute Name: admin-status

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <aigp>
            <config>
              <admin-status>disable</admin-status> <!-- operation="delete"-->
            </config>
          </aigp>
        </peer>
      </peers>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) aigp (disable|enable)
```

---

## Configure aigp send med

Enable AIGP send multi exit discriminator.

Attribute Name: aigp-send-med

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            <aigp>
              <config>
                </aigp-send-med><!-- operation="delete"-->
              </config>
            </aigp>
          </address-family>
        </address-families>
      </peer>
    </peers>
  </bgp-instance>
</bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) aigp send med
```

---

## Configure send cost community id

Send AIGP value in Cost community. And get the Community ID.

Attribute Name: send-cost-community-id

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: point-of-insertion

Attribute Type: enum (pre-bestpath|igp-cost)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
            <aigp>
              <cost-community>
                <config>
                  <point-of-insertion>pre-bestpath</point-of-insertion>
                  <send-cost-community-id>0</send-cost-community-id>
                </config>
              </cost-community>
            </aigp>
          </address-family>
        </address-families>
      </peer>
    </peers>
  </bgp-instance>
</bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) aigp send cost-community <0-255> poi (pre-bestpath|igp-
cost)
```

## Configure enable transitive

Send AIGP value in Cost community and Enable Transitive Cost Community

Attribute Name: enable-transitive

Attribute Type: uint8

Attribute Name: send-cost-community-id

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: point-of-insertion

Attribute Type: enum (pre-bestpath|igp-cost)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <peers>
        <peer>
          <peer-address>A.B.C.D|X:X::X:X</peer-address>
          <config>
            <peer-address>BGP_IP_ADDR_T</peer-address>
          </config>
          <address-families>
            <address-family>
              <safi>unicast</safi>
              <config>
                <safi>unicast</safi>
                <afi>ipv4</afi>
              </config>
              <afi>ipv4</afi>
            </address-family>
          </address-families>
          <aigp>
            <cost-community>
              <config>
                <send-cost-community-id>0</send-cost-community-id> <!--
operation="delete"-->
                <point-of-insertion>pre-bestpath</point-of-insertion> <!--
operation="delete"-->
                </enable-transitive><!-- operation="delete"-->
              </config>
            </cost-community>
          </aigp>
        </address-family>
      </address-families>
    </peer>
  </peers>
```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) aigp send cost-community <0-255> poi (pre-bestpath|igp-
cost) transitive
```

---

## clear ip bgp \* (description LINE|)

Attribute Name: peer-reset-description

Attribute Type: string

Attribute Range: 1-255

## Netconf RPC payload

```

<ipi-bgp-peer_clear-ip-bgp-all-peer xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-bgp">
  <peer-reset-description>1</peer-reset-description>
</ipi-bgp-peer_clear-ip-bgp-all-peer>

```

## Command Syntax

```
clear ip bgp * (description LINE|)
```

---

## clear bgp \* l2vpn evpn soft (out|in|)

Attribute Name: soft-reconfig

Attribute Type: enum (out|in|soft-only)

## Netconf RPC payload

```

<ipi-bgp-peer_clear-bgp-l2vpn-evpn-soft-all xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-bgp">
  <soft-reconfig>soft-only</soft-reconfig>
</ipi-bgp-peer_clear-bgp-l2vpn-evpn-soft-all>

```

## Command Syntax

```
clear bgp * l2vpn evpn soft (out|in|)
```

---

## clear bgp <1-4294967295> l2vpn evpn soft (out|in|)

Attribute Name: peer-as

Attribute Type: uint32

Attribute Range: 1-4294967295

Attribute Name: soft-reconfig

Attribute Type: enum (out|in|soft-only)



## Netconf RPC payload

```
<ipi-bgp-peer_clear-bgp-remote-as-l2vpn-evpn-soft-all xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <peer-as>1</peer-as>
  <soft-reconfig>soft-only</soft-reconfig>
</ipi-bgp-peer_clear-bgp-remote-as-l2vpn-evpn-soft-all>
```

## Command Syntax

```
clear bgp <1-4294967295> l2vpn evpn soft (out|in|)
```

## clear bgp (A.B.C.D|X:X::X:X|WORD) l2vpn evpn soft (out|in|)

Attribute Name: peer-address

Attribute Type: union

Attribute Name: soft-reconfig

Attribute Type: enum (out|in|soft-only)

## Netconf RPC payload

```
<ipi-bgp-peer_clear-bgp-peer-address-l2vpn-evpn-soft xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <peer-address>BGP_IP_ADDR_T</peer-address>
  <soft-reconfig>soft-only</soft-reconfig>
</ipi-bgp-peer_clear-bgp-peer-address-l2vpn-evpn-soft>
```

## Command Syntax

```
clear bgp (A.B.C.D|X:X::X:X|WORD) l2vpn evpn soft (out|in|)
```

# IPI-BGP-ADDRESS-FAMILY-VRF

## Configure enable auto summary

Use this attribute to enable sending summarized routes by a BGP speaker to its peers. Auto-summary is used by a BGP router to advertise summarized routes to its peers. Auto-summary can be enabled if certain routes have already been advertised: in this case, configuring auto-summary advertises the summarized routes first, then corresponding non-summarized routes are withdrawn. If certain routes have already been advertised, and auto-summary is disabled, non-summarized routes are first advertised, then the corresponding summarized routes are withdrawn from all the connected peers.

Attribute Name: enable-auto-summary

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
```

```

        <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
        </enable-auto-summary><!-- operation="delete"-->
    </address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

auto-summary

---

## Configure enable network igp sync

Use this attribute to enable IGP synchronization for BGP static network routes

Attribute Name: enable-network-igp-sync

Attribute Type: uint8

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
        </enable-network-igp-sync><!-- operation="delete"-->
      </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
network synchronization
```

## Configure map name

Use this attribute to enable or disable suppression/modification of incoming BGP updates to IP RIB/FIB table installation. In a dedicated route reflector, all the routes it receives may not be required to be stored or only few selected routes need to be stored, because it may not lie in the data path. Table maps are particularly useful to attain this restriction. When map-name attribute is set, the route map referenced in the map-name attribute shall be used to set certain properties (such as the traffic index) of the routes for installation into the RIB. The route is always downloaded, regardless of whether it is permitted or denied by the route map.

Attribute Name: map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <table-map>
            <config>
              <map-name>WORD</map-name>
            </config>
          </table-map>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

table-map WORD

## Configure table map filter

When tableMapFilter attribute is given in the table map attribute, the route map referenced is used to control whether a BGP route is to be downloaded to the IP RIB (hence the filter). A BGP route is not downloaded to the RIB if it is denied by the route map.

Attribute Name: table-map-filter

Attribute Type: boolean

Attribute Name: map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <table-map>
            <config>
              <map-name>WORD</map-name> <!-- operation="delete"-->
              <table-map-filter>true</table-map-filter> <!-- operation="delete"-->
            </config>
          </table-map>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

table-map WORD filter

## Configure local

Use this attribute to specify distance value for local routes

Attribute Name: local

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </address-family-vrf>
      </address-family-vrfs>
      <distances>
        <distance> <!-- operation="delete"-->
          <local>1</local>
          <config>
            <local>1</local>
            <ibgp>1</ibgp>
            <ebgp>1</ebgp>
          </config>
          <ibgp>1</ibgp>
          <ebgp>1</ebgp>
        </distance>
      </distances>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
distance bgp <1-255> <1-255> <1-255>
```

## Configure enable igp sync

Use this attribute to enable IGP synchronization of Internal BGP (iBGP) learned routes with the Internal Gateway Protocol (IGP) system. Synchronization is used when a BGP router should not advertise routes learned from iBGP neighbors, unless those routes are also present in an IGP (for example, OSPF). Synchronization may be enabled when all the routers in an autonomous system do not speak BGP, and the autonomous system is a transit for other autonomous systems.

Attribute Name: enable-igp-sync

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
          </enable-igp-sync><!-- operation="delete"-->
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

synchronization

## Configure ebgp max path

Use this attribute to set the number of equal-cost multi-path (ECMP) routes for eBGP. You can install multiple BGP paths to the same destination to balance the load on the forwarding path

Attribute Name: ebgp-max-path

Attribute Type: int32

Attribute Range: 2-64

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```

```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
max-paths ebgp <2-64>
```

---

## Configure bgp as

Use this attribute to set the number of equal-cost multi-path (ECMP) routes for eBGP. You can install multiple BGP paths to the same destination to balance the load on the forwarding path

Attribute Name: ebgp-max-path

Attribute Type: int32

Attribute Range: 2-64

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>

```

```

    <config>
      <vrf-name>WORD</vrf-name>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  <maximum-paths>
    <config>
      <ebgp-max-path>2</ebgp-max-path> <!-- operation="delete"-->
    </config>
  </maximum-paths>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
max-paths ebgp <2-64>
```

## Configure ibgp max path

Use this attribute to set the number of equal-cost multi-path (ECMP) routes for iBGP. You can install multiple BGP paths to the same destination to balance the load on the forwarding path.

Attribute Name: ibgp-max-path

Attribute Type: int32

Attribute Range: 2-64

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <maximum-paths>
            <config>

```



```

        <ibgp-max-path>2</ibgp-max-path> <!-- operation="delete"-->
    </config>
</maximum-paths>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
max-paths ibgp <2-64>
```

---

## Configure optional as

Use this attribute to specify optional AS for BGP dynamic peer-group

Attribute Name: optional-as

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            <optional-as-lists>
              <optional-as-list> <!-- operation="delete"-->
                <optional-as>1</optional-as>
                <config>
                  <optional-as>1</optional-as>
                </config>
              </optional-as-list>
            </optional-as-lists>
          </peer-group>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        </optional-as-list>
    </optional-as-lists>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD optional-as <1-4294967295>
```

---

## Configure auth key encrypt

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            <bgp-passwords>
              <bgp-password>
                <password>WORD</password>
              <config>
                <password>WORD</password>
              </config>
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <auth-key-encrypt>1</auth-key-encrypt>
    </bgp-password>
</bgp-passwords>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD authentication-key (0|1) WORD
```

## Configure afi

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            <bgp-passwords>
              <bgp-password>
                <password>WORD</password>
              <config>
                <password>WORD</password>

```

```

        </config>
        <auth-key-encrypt>2</auth-key-encrypt>
    </bgp-password>
</bgp-passwords>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD authentication-key WORD
```

---

## Configure multipath relax

This attribute specifies a BGP as-path relax configuration.

Attribute Name: multipath-relax

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
            </multipath-relax><!-- operation="delete"-->
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

## Command Syntax

```
bgp bestpath as-path multipath-relax
```

---

## Configure graceful shutdown

Gracefully shut down all sessions of the AFI/SAFI belonging to the vrf under this router. The BGP graceful shutdown feature reduces packet loss during maintenance activity.

Attribute Name: graceful-shutdown

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
          </graceful-shutdown><!-- operation="delete"-->
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp g-shut
```

---

## Configure graceful shutdown capable

This attribute to enable the graceful shutdown capability

Attribute Name: graceful-shutdown-capable

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
```

```

</config>
<address-family-vrfs>
<address-family-vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <safi>unicast</safi>
  <afi>ipv4</afi>
  </graceful-shutdown-capable><!-- operation="delete"-->
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp g-shut-capable
```

## Configure graceful shutdown local preference

This attribute sets the local preference of the router to use during graceful shutdown. The local preference value indicates the preferred path when there are multiple paths to the same destination in a single routing database. The path with a higher preference value is the preferred one. The preferred path is sent to all routers and access servers in the local autonomous system.

Attribute Name: graceful-shutdown-local-preference

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
    </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <afi>ipv4</afi>
        <graceful-shutdown-local-preference>0</graceful-shutdown-local-
preference> <!-- operation="delete"-->
        </address-family-vrf>
    </address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp g-shut-local-preference <0-4294967295>
```

---

## Configure additional path select all

Use this attribute to select criteria to pick the paths

Attribute Name: additional-path-select-all

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
            </additional-path-select-all><!-- operation="delete"-->
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

## Command Syntax

```
bgp additional-paths select all
```

---

## Configure additional paths mode

Use this attribute to add additional paths in the BGP table

Attribute Name: additional-paths-mode

Attribute Type: bits (send-receive|receive|send)

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
            <additional-paths-mode>send-receive</additional-paths-mode> <!--
operation="delete"-->
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
bgp additional-paths (send-receive|receive|send)
```

---

## Configure additional paths best select count

Use this attribute to select best N paths

Attribute Name: additional-paths-best-select-count

Attribute Type: uint8

Attribute Range: 2-3

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
```



```

    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
      <additional-paths-best-select-count>2</additional-paths-best-select-
count> <!-- operation="delete"-->
    </address-family-vrf>
  </address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp additional-paths select best <2-3>
```

## Configure protocol type

Use this attribute to inject routes from one routing process into another. Redistribution is used by routing protocols to advertise routes that are learned by some other means, such as by another routing protocol or by static routes. Since all internal routes are dumped into BGP, careful filtering is applied to make sure that only routes to be advertised reach the internet, not everything. This attribute allows redistribution by injecting prefixes from one routing protocol into another routing protocol.

Attribute Name: protocol-type

Attribute Type: enum (kernel|connected|static|rip|ospf|isis|connected-host-routes)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <route-redistribute-lists>
            <route-redistribute-list> <!-- operation="delete"-->

```

```

        <protocol-type>kernel</protocol-type>
      <config>
        <protocol-type>kernel</protocol-type>
      </config>
    </route-redirect-list>
  </route-redirect-lists>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
redistribute (kernel|connected|static|rip|ospf|isis|connected-host-routes)
```

## Configure redist route map name

Use this attribute to configure route map to be used for redistributed routes.

Attribute Name: redist-route-map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
          <route-redirect-lists>
            <route-redirect-list>
              <protocol-type>kernel</protocol-type>
              <config>
                <protocol-type>kernel</protocol-type>
              </config>
              <redist-route-map-name>WORD</redist-route-map-name> <!--
operation="delete"-->
            </route-redirect-list>
          </route-redirect-lists>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    </route-redistribute-lists>
  </address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```

redistribute (kernel|connected|static|rip|ospf|isis|connected-host-routes) route-
map WORD

```

## Configure ospf instance number

Use this attribute to inject routes from one routing process into another. Redistribution is used by routing protocols to advertise routes that are learned by some other means, such as by another routing protocol or by static routes. Since all internal routes are dumped into BGP, careful filtering is applied to make sure that only routes to be advertised reach the internet, not everything. This attribute allows redistribution by injecting prefixes from one routing protocol into another routing protocol.

Attribute Name: ospf-instance-number

Attribute Type: union

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <bgp-redistribute-ospfs>
            <bgp-redistribute-ospf> <!-- operation="delete"-->
              <ospf-instance-number>""</ospf-instance-number>
              <config>
                <ospf-instance-number>""</ospf-instance-number>
              </config>
            </bgp-redistribute-ospf>
          </bgp-redistribute-ospfs>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
redistribute (ospf) (WORD|<1-65535>)
```

## Configure redistribute ospf route map

Use this attribute to specify route map to redistribute routes from OSPF into BGP.

Attribute Name: redistribute-ospf-route-map

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <bgp-redistribute-ospfs>
            <bgp-redistribute-ospf>
              <ospf-instance-number>""</ospf-instance-number>
              <config>
                <ospf-instance-number>""</ospf-instance-number>
              </config>
              <redistribute-ospf-route-map>WORD</redistribute-ospf-route-map> <!--
- operation="delete"-->
            </bgp-redistribute-ospf>
          </bgp-redistribute-ospfs>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
redistribute (ospf) route-map WORD
```

---

## Configure peer as

This attribute specifies a neighbors autonomous system number. If the specified ASN matches the ASN number specified in the router bgp global configuration, the neighbor is identified as internal. If the ASN does not match, it is identified as external to the local AS.

Attribute Name: peer-as

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
                <peer-as>1</peer-as>
              </vrf-peer>
            </vrf-peers>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) remote-as <1-4294967295>
```

## Configure source identifier

This attribute allows internal BGP sessions to use any operational interface for TCP connections. Use this attribute in conjunction with any specified interface on the router. The loopback interface is the interface that is most commonly used with this attribute. The use of loopback interface eliminates a dependency and BGP does not have to rely on the availability of a particular interface for making TCP connections.

Attribute Name: source-identifier

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
                <source-identifier>WORD</source-identifier> <!--
operation="delete"-->
              </vrf-peer>
            </vrf-peers>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor update-source WORD
```

---

## Configure bgp version

BGP Version. This attribute configures router to accept only a particular BGP version. By default, the system uses BGP version 4 and on request dynamically negotiates down to version 2. Using this attribute disables the routers version-negotiation capability and forces the router to use only a specified version with the neighbor.

Attribute Name: bgp-version

Attribute Type: uint8

Default Value: 4

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
                <bgp-version>(4)</bgp-version> <!-- operation="delete"-->
              </vrf-peer>
            </vrf-peers>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor version (4)
```

---

## Configure peer connection interval

Connect timer value. This attribute sets the timers for a specific BGP neighbor. Keepalive messages are sent by a router to inform another router that the BGP connection between the two is still active. The keepalive interval is the

period of time between each keepalive message sent by the router. The holdtime interval is the time the router waits to receive a keepalive message and if it does not receive a message for this period it declares the neighbor dead.

Attribute Name: peer-connection-interval

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-65535

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
                <peer-connection-interval>1</peer-connection-interval> <!--
operation="delete"-->
              </vrf-peer>
            </vrf-peers>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor timers connect <1-65535>
```

## Configure hold time

Use this attribute to globally set or reset the holdtime values for all the neighbors.

Attribute Name: hold-time



Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: keep-alive

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </vrf-peers>
          <vrf-peer>
            <peer-address>CML_IP_ADDR_T</peer-address>
            <config>
              <peer-address>CML_IP_ADDR_T</peer-address>
            </config>
            <timers>
              <config>
                <keep-alive>0</keep-alive>
                <hold-time>0</hold-time>
              </config>
            </timers>
          </vrf-peer>
        </vrf-peers>
      </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor timers <0-65535> <0-65535>
```

---

## Configure enforce multihop

This attribute turns on the enforcement of eBGP neighbors perform multihop.

Attribute Name: enforce-multihop

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
                </enforce-multihop><!-- operation="delete"-->
              </vrf-peer>
            </vrf-peers>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor enforce-multihop
```

---

## Configure peer shutdown

This attribute disables a neighbor administratively. Use this attribute to terminate any active session for a specified neighbor and clear all related routing information. In case a peer group is specified for shutdown, a large number of peering sessions could be terminated.

Attribute Name: peer-shutdown

Attribute Type: uint8

Attribute Name: peer-shutdown-description

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
                <peer-shutdown-description>1</peer-shutdown-description> <!--
operation="delete"-->
              </config>
              </peer-shutdown><!-- operation="delete"-->
            </vrf-peer>
          </vrf-peers>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor shutdown (description LINE|)
```

## Configure peer group tag

Creates a peer group. Neighbors with the same update policies are grouped into peer groups. This facilitates the updates of various policies, such as distribute and filter lists. The peer group is then configured easily with any of the neighbor attributes. Any changes made to the peer group affect all members.

Attribute Name: peer-group-tag

Attribute Type: string

Attribute Name: peer-group-range

Attribute Type: union

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group> <!-- operation="delete"-->
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
                <peer-group-range>0</peer-group-range>
              </config>
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD peer-group
```

## Configure peer group range

this attribute creates a Dynamic peer group for address family. IPv4/IPv6 prefix range Must be specified to create dynamic peer group.

Attribute Name: peer-group-range

Attribute Type: union

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
          <peer-group-range>A.B.C.D/M</peer-group-range>
        </peer-group>
      </peer-groups>
    </address-family-vrf>
  </address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

**Command Syntax**

```
neighbor WORD peer-group range A.B.C.D/M
```

**Configure safi**

this attribute creates a Dynamic peer group for address family. IPv4/IPv6 prefix range Must be specified to create dynamic peer group.

Attribute Name: peer-group-range

Attribute Type: union

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>

```

```

        <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        <peer-group-range> (X:X::X:X/M) </peer-group-range>
    </peer-group>
    </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD peer-group range (X:X::X:X/M)
```

---

## Configure group limit

Use this attribute to specify max number of peers in a dynamic peer-group for address family

Attribute Name: group-limit

Attribute Type: uint8

Attribute Range: 1-200

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
      <config>

```

```

        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
    <config>
        <peer-group-tag>WORD</peer-group-tag>
    </config>
        <group-limit>1</group-limit> <!-- operation="delete"-->
    </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD limit <1-200>
```

## Configure vrf name

This attribute specifies a neighbors autonomous system number. If the specified ASN matches the ASN number specified in the router bgp global configuration, the neighbor is identified as internal. If the ASN does not match, it is identified as external to the local AS.

Attribute Name: peer-as

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <safi>unicast</safi>
        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        <peer-as>1</peer-as> <!-- operation="delete"-->
    </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD remote-as <1-4294967295>
```

---

## Configure keep alive

Use this attribute to globally set or reset the holdtime values for all the neighbors.

Attribute Name: hold-time

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: keep-alive

Attribute Type: uint16

Attribute Range: 0-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <address-family-vrfs>
        <address-family-vrf>
            <vrf-name>WORD</vrf-name>
            <config>
                <vrf-name>WORD</vrf-name>
                <safi>unicast</safi>
                <afi>ipv4</afi>
            </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </address-family-vrf>
        </address-family-vrfs>
    </bgp-instance>
</bgp-instances>
</bgp>

```



```

    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <timers>
      <config>
        <keep-alive>0</keep-alive>
        <hold-time>0</hold-time>
      </config>
    </timers>
  </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD timers <0-65535> <0-65535>
```

## Configure peer shutdown description

This attribute disables a neighbor administratively. Use this attribute to terminate any active session for a specified neighbor and clear all related routing information. In case a peer group is specified for shutdown, a large number of peering sessions could be terminated.

Attribute Name: peer-shutdown

Attribute Type: uint8

Attribute Name: peer-shutdown-description

Attribute Type: string

Attribute Range: 1-255

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>

```

```

        <afi>ipv4</afi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
            <peer-shutdown-description>1</peer-shutdown-description> <!--
operation="delete"-->
        </config>
        </peer-shutdown><!-- operation="delete"-->
    </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD shutdown (description LINE|)
```

## Configure enabled

Use this attribute to accept and attempt BGP connections to external peers on indirectly connected networks. Multihop is not established if the only route to the multihop peer is a default route. This avoids loop formation.

Attribute Name: enabled

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <ebgp-multihop>
      <config>
        </enabled>
      </config>
    </ebgp-multihop>
  </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD ebgp-multihop
```

---

## Configure maximum hop count

Use this attribute to accept and attempt BGP connections to external peers on indirectly connected networks. Multihop is not established if the only route to the multihop peer is a default route. This avoids loop formation.

Attribute Name: enabled

Attribute Type: empty

Attribute Name: maximum-hop-count

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
      </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <safi>unicast</safi>
        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        <ebgp-multihop>
        <config>
            <maximum-hop-count>1</maximum-hop-count> <!--
operation="delete"-->
            </enabled><!-- operation="delete"-->
        </config>
    </ebgp-multihop>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD ebgp-multihop <1-255>
```

---

## Configure neighbor passive

Use this attribute to set a BGP neighbor as passive.

Attribute Name: neighbor-passive

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>

```

```

        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
    <config>
        <peer-group-tag>WORD</peer-group-tag>
    </config>
        </neighbor-passive><!-- operation="delete"-->
    </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD passive
```

---

## Configure disable capability negotiation

Use this attribute to disable capability negotiation. The capability negotiation is performed by default. This attribute is used to allow compatibility with older BGP versions that have no capability parameters used in open messages between peers.

Attribute Name: disable-capability-negotiation

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
    <config>
        <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
        <vrf-name>WORD</vrf-name>
    <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
    </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
    <config>

```

```

        <peer-group-tag>WORD</peer-group-tag>
    </config>
    </disable-capability-negotiation><!-- operation="delete"-->
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD dont-capability-negotiate
```

## Configure enable dynamic capability

Use this attribute to enable the dynamic capability for a specific peer. This attribute allows a BGP speaker to advertise or withdraw an address family capability to a peer in a non-disruptive manner.

Attribute Name: enable-dynamic-capability

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            </enable-dynamic-capability><!-- operation="delete"-->
          </peer-group>
        </peer-groups>
      </address-family-vrf>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD capability dynamic
```

## Configure min route advertisement interval

Minimum route advertisement interval. Sets minimum interval between the sending of BGP routing updates. To reduce the flapping of routes to internet, a minimum advertisement interval is set, so that the BGP routing updates are sent only per interval seconds. BGP dampening can also be used to control the effects of flapping routes.

Attribute Name: min-route-advertisement-interval

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <min-route-advertisement-interval>0</min-route-advertisement-
interval> <!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </address-family-vrf>
  </address-family-vrfs>
</bgp-instance>

```

```
</bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD advertisement-interval <0-65535>
```

---

## Configure peer as origin interval

Time interval. This attribute adjust the interval of sending AS origination routing updates. This attribute is used to change the minimum interval between the sending of AS-origination routing updates.

Attribute Name: peer-as-origin-interval

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-65535

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <peer-as-origin-interval>1</peer-as-origin-interval> <!--
operation="delete"-->
    </peer-group>
  </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>
```



## Command Syntax

```
neighbor WORD as-origination-interval <1-65535>
```

## Configure neighbor as override

Use this attribute to configure a PE router to override the Autonomous System Number (ASN) of a site with the ASN of a provider. BGP normally ignores the routes from the same AS. However, this attribute is used to override the customers ASN in BGP, so that the customer CE accepts and installs routes from the same AS. Typically, this attribute is used when Customer Edge (CE) routers have the same ASN in some or all sites. As per BGP requirement, a BGP speaker rejects a route that has the same ASN as itself, in the AS\_PATH attribute. Thus the CE routers having the same ASN do not accept routes from each other. Set neighborAsOverrideAf attribute on the PE router removes the CE neighbors ASN from the AS\_PATH attribute allowing CE routers with the same ASN to accept routes from each other.

Attribute Name: neighbor-as-override

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          </neighbor-as-override><!-- operation="delete"-->
        </peer-group>
      </peer-groups>
    </address-family-vrf>
  </address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD as-override
```

## Configure peer description

Use this attribute to associate a description with a neighbor. This attribute helps in identifying a neighbor quickly. It is useful for an ISP that has multiple neighbor relationships.

Attribute Name: peer-description

Attribute Type: string

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                <peer-description>LINE</peer-description> <!-- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

## Command Syntax

```
neighbor WORD description LINE
```

---

## Configure peer restart time

This attribute sets a different restart-time other than the global restart-time. This attribute takes precedence over the restart-time value specified using the graceful-restart-set attribute. The restart-time value is the maximum time that a graceful-restart neighbor waits to come back up after a restart. The default value is 120 seconds.

Attribute Name: peer-restart-time

Attribute Type: uint32

Attribute Range: 1-3600

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                <peer-restart-time>1</peer-restart-time> <!-- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor WORD restart-time <1-3600>
```

---

## Configure site origin identifier

Use this attribute to enable the site-of-origin (SOO) feature. If the customer AS is multi-homed to the ISP, this attribute ensures that the PE does not advertise the routes back to the same AS.

Attribute Name: site-origin-identifier

Attribute Type: string

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                <site-origin-identifier>AS:nn_or_IP:nn</site-origin-identifier> <!--
- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor WORD soo AS:nn_or_IP:nn
```

## Configure graceful shut

Use this attribute to start a graceful shutdown for the BGP session of the specified BGP neighbor. The BGP session for this neighbor is shut down after the graceful shutdown timer expires. If there is no alternate path available for traffic to flow prior the actual shutdown of the BGP session, this path is made available for 60 seconds or for configured time after which the path is no longer available and traffic is dropped.

Attribute Name: graceful-shut

Attribute Type: uint8

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                </graceful-shut><!-- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>

```

**Command Syntax**

```
neighbor WORD g-shut
```

**Configure graceful shut timer**

Use this attribute to configure the value of the graceful shutdown timer. After the timer expires, the BGP session initiated for graceful shutdown is shut down.

Attribute Name: graceful-shut-timer

Attribute Type: uint32

Attribute Range: 10-65535

**Netconf edit-config payload**

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>

```

```

    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <graceful-shut-timer>10</graceful-shut-timer> <!--
operation="delete"-->
    </peer-group>
  </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD g-shut-timer <10-65535>
```

---

## Configure bgp port

The BGP port number of a neighbor

Attribute Name: bgp-port

Attribute Type: uint16

Default Value: 179

Attribute Range: 0-65535

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    <address-family-vrfs>

```

```

<address-family-vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <safi>unicast</safi>
  <afi>ipv4</afi>
</peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  <bgp-port>0</bgp-port> <!-- operation="delete"-->
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD port <0-65535>
```

---

## Configure enable ext opt param len

Use this attribute for a specific peer to encode extended optional parameter length.

Attribute Name: enable-ext-opt-param-len

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>

```

```

        <safi>unicast</safi>
        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        </enable-ext-opt-param-len><!-- operation="delete"-->
    </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD extended-optional-param
```

---

## Configure tcp adjust mss

Use this attribute to set the BGP TCP MSS value of a neighbor.

Attribute Name: tcp-adjust-mss

Attribute Type: uint16

Attribute Range: 40-1440

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
          <peer-group>
            <peer-group-tag>WORD</peer-group-tag>
          <config>

```



```

        <peer-group-tag>WORD</peer-group-tag>
    </config>
    <tcp-adjust-mss>40</tcp-adjust-mss> <!-- operation="delete"-->
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD tcp-mss <40-1440>
```

## Configure enable peer bfd

Enable bidirectional forwarding detection (BFD) for the BGP peer

Attribute Name: enable-peer-bfd

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
              </enable-peer-bfd><!-- operation="delete"-->
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD fall-over bfd
```

---

## Configure enable peer bfd multihop

Enable bidirectional forwarding detection (BFD) for the BGP peer with multihop

Attribute Name: enable-peer-bfd-multihop

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
              </enable-peer-bfd-multihop><!-- operation="delete"-->
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD fall-over bfd multihop
```

---

## Configure activate

Activate/Deactivate neighbor. This attribute enables or disables the exchange of AF information with a neighboring router.

Attribute Name: activate

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                </activate><!-- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

### Command Syntax

```
neighbor WORD activate
```

---

## Configure default peer route map name

This attribute allows a BGP local router to send the default route 0.0.0.0 to a neighbor for use as a default route for specified address-family.

Attribute Name: default-peer-route-map-name

Attribute Type: uint8

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
              </default-peer-route-map-name><!-- operation="delete"-->
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
neighbor WORD default-originate
```

---

## Configure peer route map orig name

This attribute configures route map to be used for a BGP local router to send the default route 0.0.0.0 to a neighbor for use as a default route for specified address-family. This attribute can be used with standard or extended access lists.

Attribute Name: peer-route-map-orig-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
```

```

    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      <peer-groups>
      <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
          <peer-group-tag>WORD</peer-group-tag>
        </config>
        <peer-route-map-orig-name>WORD</peer-route-map-orig-name> <!--
operation="delete"-->
      </peer-group>
    </peer-groups>
  </address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD default-originate route-map WORD
```

## Configure weight

This attribute specifies a weight value, for specified address-family, to all routes learned from a neighbor for specified address-family. The route with the highest weight gets preference when the same prefix is learned from more than one peer. Unlike the local-preference attribute, the weight attribute is relevant only to the local router. When the weight is set for a peer group, all members of the peer group get the same weight. This attribute can also be used to assign a different weight to an individual peer-group member. When an individually-configured weight of a peer-group member is removed, its weight is reset to its peer groups weight.

Attribute Name: weight

Attribute Type: uint16

Default Value: 0

Attribute Range: 0-65535

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
```

```

<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <weight>0</weight> <!-- operation="delete"-->
    </peer-group>
  </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD weight <0-65535>
```

---

## Configure peer route reflector

This attribute configures the router as a BGP route reflector and configure the specified neighbor as its client for specified address-family. Route reflectors are a solution for the explosion of iBGP peering within an autonomous system. By route reflection the number of iBGP peers within an AS is reduced. Use this attribute to configure the local router as the route reflector and specify neighbors as its client. An AS can have more than one route reflector. One route reflector treats the other route reflector as another iBGP speaker.

Attribute Name: peer-route-reflector

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>

```

```

<config>
  <bgp-as>1</bgp-as>
</config>
<address-family-vrfs>
<address-family-vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <safi>unicast</safi>
  <afi>ipv4</afi>
<peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  </peer-route-reflector><!-- operation="delete"-->
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD route-reflector-client
```

## Configure peer remove private as

This attribute removes the private Autonomous System (AS) number from outbound updates. Private AS numbers are not advertised to the Internet. This attribute is used with external BGP peers only. The router removes the AS numbers only if the update includes private AS numbers. If the update includes both private and public AS numbers, the system treats it as an error.

Attribute Name: peer-remove-private-as

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
  <address-family-vrfs>

```

```

<address-family-vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <safi>unicast</safi>
  <afi>ipv4</afi>
</peer-groups>
<peer-group>
  <peer-group-tag>WORD</peer-group-tag>
  <config>
    <peer-group-tag>WORD</peer-group-tag>
  </config>
  </peer-remove-private-as><!-- operation="delete"-->
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD remove-private-AS
```

## Configure no send community

This attribute specifies if a community attribute should be sent to a BGP neighbor for specified address-family. The community attribute groups destinations in a certain community and applies routing decisions according to those communities. By default, both standard and extended community attributes are sent to a neighbor

Attribute Name: no-send-community

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>

```



```

    <afi>ipv4</afi>
  </config>
  <safi>unicast</safi>
  <afi>ipv4</afi>
  <peer-groups>
  <peer-group>
    <peer-group-tag>WORD</peer-group-tag>
    <config>
      <peer-group-tag>WORD</peer-group-tag>
    </config>
    </no-send-community><!-- operation="delete"-->
  </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
no neighbor WORD send-community
```

## Configure no send community type

This attribute specifies the type of community attribute to be sent to a BGP neighbor.

Attribute Name: no-send-community-type

Attribute Type: bits (both|standard|extended|large)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
          <peer-group>
            <peer-group-tag>WORD</peer-group-tag>

```

```

        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        <no-send-community-type>both</no-send-community-type> <!--
operation="delete"-->
        </peer-group>
    </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
no neighbor WORD send-community (both|standard|extended|large)
```

## Configure neighbor attribute unchanged

This attribute advertises unchanged BGP AS path, next hop and med to the specified neighbor.

Attribute Name: neighbor-attribute-unchanged

Attribute Type: bits (as-path|next-hop|med)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
              <neighbor-attribute-unchanged>14</neighbor-attribute-unchanged> <!--
- operation="delete"-->
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    </address-family-vrf>
  </address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD attribute-unchanged
```

## Configure orf prefix capability

This attribute enables Outbound Router Filtering (ORF), and advertise the ORF capability to its neighbors. The ORFs send and receive capabilities to lessen the number of updates exchanged between neighbors. By filtering updates, this option minimizes generating and processing of updates. The two routers exchange updates to maintain the ORF for each router.

Attribute Name: orf-prefix-capability

Attribute Type: bits (both|receive|send)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
              <orf-prefix-capability>both</orf-prefix-capability> <!--
operation="delete"-->
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>

```

---

```
</bgp>
```

## Command Syntax

```
neighbor WORD capability orf prefix-list (both|receive|send)
```

---

## Configure peer allow ebgp vpn

This attribute allows an eBGP neighbor to be a VPN peer. By default, BGP VPN functionality is allowed only for iBGP peers. Using the peer-allow-ebgp-vpn attribute allows the VPN connection to be established to an eBGP peer.

Attribute Name: peer-allow-ebgp-vpn

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                </peer-allow-ebgp-vpn><!-- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

## Command Syntax

```
neighbor WORD allow-ebgp-vpn
```

## Configure allow as number

This attribute advertises prefixes (routes) even when the source of the prefixes is from the same Autonomous System (AS) number for specified address-family. Use this attribute in a scenario where two routers at different locations use the same Autonomous System number and are connected via an ISP. Once prefixes arrive from one branch at the ISP, they are tagged with the customers AS number. By default, when the ISP passes the prefixes to the other router, the prefixes are dropped if the other router uses the same AS number. Use this attribute to advertise the prefixes at the other side. Control the number of times an AS number is advertised by specifying a number. In a hub and spoke configuration in a VPN, a PE (Provider Edge) router advertises all prefixes containing duplicate AS numbers. Use this attribute to configure two VRFs on each PE router to receive and advertise prefixes. One of the VRFs receives prefixes with AS numbers from all PE routers and then advertises them to neighboring PE routers. The other VRF receives prefixes with AS numbers from the CE (Customer Edge) router and advertises them to all PE routers in the hub and spoke configuration.

Attribute Name: allow-as-number

Attribute Type: uint32

Default Value: 3

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
                <allow-as-number>1</allow-as-number> <!-- operation="delete"-->
              </peer-group>
            </peer-groups>
          </address-family-vrf>
        </address-family-vrfs>
      </bgp-instance>
    </bgp-instances>
  </bgp>
```

## Command Syntax

```
neighbor WORD allowas-in <1-10>
```

---

## Configure capability graceful restart

This attribute configures the router to advertise the Graceful Restart Capability to the neighbors. This configuration indicates that the BGP speaker has the ability to preserve its forwarding state for the address family when BGP restarts. Use this attribute to advertise to the neighbor routers the capability of graceful restart.

Attribute Name: capability-graceful-restart

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD capability graceful-restart
```

## Configure prefix count

This attribute specifies number of prefixes that a BGP router is allowed to receive from a neighbor. When the maximum-prefix-warning attribute is not set and extra prefixes are received, the router ends the peering.

Attribute Name: prefix-count

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </address-family-vrf>
      </address-family-vrfs>
      <peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <maximum-prefixes>
            <maximum-prefix> <!-- operation="delete"-->
              <prefix-count>1</prefix-count>
              <config>
                <prefix-count>1</prefix-count>
              </config>
            </maximum-prefix>
          </maximum-prefixes>
        </peer-group>
      </peer-groups>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295>
```

---

## Configure stop update

Stop installing the routes when limit is exceeded.

Attribute Name: stop-update

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <maximum-prefixes>
            <maximum-prefix>
              <prefix-count>1</prefix-count>
              <config>
                <prefix-count>1</prefix-count>
              </config>
            </stop-update>
          </maximum-prefix>
        </maximum-prefixes>
      </peer-group>
    </peer-groups>
  </address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>
```



## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> stop-update
```

## Configure maximum prefix warning

This attribute when enabled only give warning message when limit is exceeded. When it is not set and extra prefixes are received, the router ends the peering.

Attribute Name: maximum-prefix-warning

Attribute Type: uint8

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <maximum-prefixes>
            <maximum-prefix>
              <prefix-count>1</prefix-count>
              <config>
                <prefix-count>1</prefix-count>
              </config>
            </maximum-prefix-warning>
          </maximum-prefix>
        </maximum-prefixes>
      </peer-group>
    </peer-groups>
  </address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
```

---

```
</bgp>
```

## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> warning-only
```

---

## Configure threshold percentage

Threshold-value in percen. This attribute controls the number of prefixes that can be received from a neighbor. This attribute allows the configuration of a specified number of prefixes that a BGP router is allowed to receive from a neighbor. When the maximum-prefix-warning attribute is not set and extra prefixes are received, the router ends the peering.

Attribute Name: threshold-percentage

Attribute Type: uint8

Default Value: 75

Attribute Range: 1-100

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <maximum-prefixes>
            <maximum-prefix>
              <prefix-count>1</prefix-count>
              <config>
                <prefix-count>1</prefix-count>
              </config>
              <threshold-percentage>1</threshold-percentage>
            </maximum-prefix>
          </maximum-prefixes>
```

```

    </peer-group>
  </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> <1-100>
```

## Configure warning only

Throw warning if exceeds threshold-value

Attribute Name: warning-only

Attribute Type: uint8

Attribute Name: threshold-percentage

Attribute Type: uint8

Default Value: 75

Attribute Range: 1-100

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <maximum-prefixes>
            <maximum-prefix>
              <prefix-count>1</prefix-count>
            </maximum-prefix>
          </maximum-prefixes>
        </peer-group>
      </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <config>
            <prefix-count>1</prefix-count>
            <threshold-percentage>1</threshold-percentage>
        </config>
    </warning-only>
</maximum-prefix>
</maximum-prefixes>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD maximum-prefix <1-4294967295> <1-100> warning-only
```

---

## Configure unsuppress route map name

unsuppress map name. This attribute is used to selectively leak more-specific routes to a particular neighbor.

Attribute Name: unsuppress-route-map-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <unsuppress-route-map-name>WORD</unsuppress-route-map-name> <!--
operation="delete"-->
        </peer-group>
    </peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD unsuppress-map WORD
```

---

## Configure access list identifier

Access List information

Attribute Name: access-list-identifier

Attribute Type: string

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </peer-groups>
        <peer-group>
          <peer-group-tag>WORD</peer-group-tag>
          <config>
            <peer-group-tag>WORD</peer-group-tag>
          </config>
          <distribute-list-filters>
            <distribute-list-filter>
              <filter-direction>in</filter-direction>
              <config>
                <filter-direction>in</filter-direction>
              </config>
            </distribute-list-filter>
          </distribute-list-filters>
        </peer-group>
      </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

        <access-list-identifier>WORD</access-list-identifier>
    </distribute-list-filter>
</distribute-list-filters>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD distribute-list WORD (in|out)
```

## Configure as access list identifier

Access-list number. This attribute sets a BGP filter. This attribute specifies an access list filter on updates based on the BGP autonomous system paths. Each filter is an access list based on regular expressions

Attribute Name: as-access-list-identifier

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
              <config>
                <peer-group-tag>WORD</peer-group-tag>
              </config>
            <as-list-filters>
              <as-list-filter>
                <as-list-direction>in</as-list-direction>
              <config>

```

```

        <as-list-direction>in</as-list-direction>
    </config>
    <as-access-list-identifier>WORD</as-access-list-identifier>
</as-list-filter>
</as-list-filters>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD filter-list WORD (in|out)
```

## Configure prefix list name

This attribute specifies a prefix list for filtering BGP advertisements for specified address-family. Filtering by prefix list matches the prefixes of routes with those listed in the prefix list. If there is a match, the route is used. An empty prefix list permits all prefixes. If a given prefix does not match any entries of a prefix list, the route is denied access. When multiple entries of a prefix list match a prefix, the entry with the smallest sequence number is considered to be a real match. The router begins the search at the top of the prefix list, with the sequence number 1. Once a match or deny occurs, the router does not need to go through the rest of the prefix list. For efficiency the most common matches or denials are listed at the top.

Attribute Name: prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <peer-groups>
            <peer-group>
              <peer-group-tag>WORD</peer-group-tag>
            </peer-group>
          </peer-groups>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <peer-group-tag>WORD</peer-group-tag>
    </config>
    <prefix-list-filters>
    <prefix-list-filter>
        <prefix-filter-direction>in</prefix-filter-direction>
        <config>
            <prefix-filter-direction>in</prefix-filter-direction>
        </config>
        <prefix-list-name>WORD</prefix-list-name>
    </prefix-list-filter>
    </prefix-list-filters>
</peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD prefix-list WORD (in|out)
```

---

## Configure route map name

Use this attribute to apply a route map to incoming or outgoing routes. This attribute filters updates and modifies attributes. A route map is applied to inbound or outbound updates. Only the routes that pass the route map are sent or accepted in updates.

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```



```

    <peer-groups>
    <peer-group>
      <peer-group-tag>WORD</peer-group-tag>
      <config>
        <peer-group-tag>WORD</peer-group-tag>
      </config>
      <route-map-filters>
      <route-map-filter>
        <route-map-direction>in</route-map-direction>
        <config>
          <route-map-direction>in</route-map-direction>
        </config>
        <route-map-name>WORD</route-map-name>
      </route-map-filter>
    </route-map-filters>
  </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD route-map WORD (in|out)
```

## Configure peer address

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
    </address-family-vrf>
    </address-family-vrfs>
  </bgp-instance>
</bgp-instances>
</bgp>

```

```

    <afi>ipv4</afi>
  <vrf-peers>
    <vrf-peer>
      <peer-address>CML_IP_ADDR_T</peer-address>
      <config>
        <peer-address>CML_IP_ADDR_T</peer-address>
      </config>
      <bgp-passwords>
        <bgp-password>
          <password>WORD</password>
          <config>
            <password>WORD</password>
          </config>
          <auth-key-encrypt>1</auth-key-encrypt>
        </bgp-password>
      </bgp-passwords>
    </vrf-peer>
  </vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor authentication-key (0|1) WORD
```

---

## Configure password

Use this attribute to configure the authentication key to specify if the password is to be encrypted or not.

Attribute Name: auth-key-encrypt

Attribute Type: enum (0|1)

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    <safi>unicast</safi>
    <afi>ipv4</afi>
  <vrf-peers>
  <vrf-peer>
    <peer-address>CML_IP_ADDR_T</peer-address>
    <config>
      <peer-address>CML_IP_ADDR_T</peer-address>
    </config>
    <bgp-passwords>
    <bgp-password>
      <password>WORD</password>
      <config>
        <password>WORD</password>
      </config>
      <auth-key-encrypt>2</auth-key-encrypt>
    </bgp-password>
  </bgp-passwords>
</vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor authentication-key WORD
```

---

## Configure peer interface name

Interface name. Configures IP address or IPv6 address on interface

Attribute Name: peer-interface-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          <safi>unicast</safi>
          <afi>ipv4</afi>

```

```

    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  <vrf-peers>
  <vrf-peer>
    <peer-address>CML_IP_ADDR_T</peer-address>
    <config>
      <peer-address>CML_IP_ADDR_T</peer-address>
    </config>
    <peer-interface-name>WORD</peer-interface-name> <!--
operation="delete"-->
  </vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) interface WORD
```

## Configure de activate

Deactivate neighbor. This attribute disables the exchange of AF information with a neighboring router.

Attribute Name: de-activate

Attribute Type: uint8

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        <vrf-peers>
        <vrf-peer>
          <peer-address>CML_IP_ADDR_T</peer-address>

```

```

    <config>
      <peer-address>CML_IP_ADDR_T</peer-address>
    </config>
  </de-activate><!-- operation="delete"-->
</vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor de-activate
```

## Configure mapped peer group tag af

BGP peer group name. Adds a neighbor to an existing peer group. Neighbors with the same update policies are grouped into peer groups. This facilitates the updates of various policies, such as distribute and filter lists. The peer group is then configured easily with any of the neighbor attributes. Any changes made to the peer group affect all members.

Attribute Name: mapped-peer-group-tag-af

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
              <mapped-peer-group-tag-af>WORD</mapped-peer-group-tag-af> <!--
operation="delete"-->

```

```

        </vrf-peer>
    </vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor (A.B.C.D|X:X::X:X) peer-group WORD
```

---

## Configure filter direction

Access List information

Attribute Name: access-list-identifier

Attribute Type: string

### Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </vrf-peers>
        <vrf-peer>
          <peer-address>CML_IP_ADDR_T</peer-address>
          <config>
            <peer-address>CML_IP_ADDR_T</peer-address>
          </config>
          <distribute-list-filters>
            <distribute-list-filter>
              <filter-direction>in</filter-direction>
              <config>
                <filter-direction>in</filter-direction>
              </config>
              <access-list-identifier>WORD</access-list-identifier>
            </distribute-list-filter>

```

```

        </distribute-list-filters>
    </vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor distribute-list WORD (in|out)
```

---

## Configure as list direction

Access-list number. This attribute sets a BGP filter. This attribute specifies an access list filter on updates based on the BGP autonomous system paths. Each filter is an access list based on regular expressions

Attribute Name: as-access-list-identifier

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
              <as-list-filters>
                <as-list-filter>
                  <as-list-direction>in</as-list-direction>
                  <config>
                    <as-list-direction>in</as-list-direction>
                  </config>

```

```

        <as-access-list-identifier>WORD</as-access-list-identifier>
    </as-list-filter>
</as-list-filters>
</vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor filter-list WORD (in|out)
```

## Configure prefix filter direction

This attribute specifies a prefix list for filtering BGP advertisements for specified address-family. Filtering by prefix list matches the prefixes of routes with those listed in the prefix list. If there is a match, the route is used. An empty prefix list permits all prefixes. If a given prefix does not match any entries of a prefix list, the route is denied access. When multiple entries of a prefix list match a prefix, the entry with the smallest sequence number is considered to be a real match. The router begins the search at the top of the prefix list, with the sequence number 1. Once a match or deny occurs, the router does not need to go through the rest of the prefix list. For efficiency the most common matches or denies are listed at the top.

Attribute Name: prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>
              <peer-address>CML_IP_ADDR_T</peer-address>
              <config>
                <peer-address>CML_IP_ADDR_T</peer-address>
              </config>
            </vrf-peer>
          </vrf-peers>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```



```

    <prefix-list-filters>
    <prefix-list-filter>
      <prefix-filter-direction>in</prefix-filter-direction>
      <config>
        <prefix-filter-direction>in</prefix-filter-direction>
      </config>
      <prefix-list-name>WORD</prefix-list-name>
    </prefix-list-filter>
  </prefix-list-filters>
</vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor prefix-list WORD (in|out)
```

## Configure route map direction

Use this attribute to apply a route map to incoming or outgoing routes. This attribute filters updates and modifies attributes. A route map is applied to inbound or outbound updates. Only the routes that pass the route map are sent or accepted in updates.

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>

```

```

    <peer-address>CML_IP_ADDR_T</peer-address>
  <config>
    <peer-address>CML_IP_ADDR_T</peer-address>
  </config>
  <route-map-filters>
  <route-map-filter>
    <route-map-direction>in</route-map-direction>
    <config>
      <route-map-direction>in</route-map-direction>
    </config>
    <route-map-name>WORD</route-map-name>
  </route-map-filter>
</route-map-filters>
</vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor route-map WORD (in|out)
```

---

## Configure identifier

This attribute to specifies a BGP confederation identifier.

Attribute Name: identifier

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
      <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          <safi>unicast</safi>
          <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </address-family-vrf>
    </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <confederation>
        <config>
            <identifier>1</identifier> <!-- operation="delete"-->
        </config>
    </confederation>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp confederation identifier <1-4294967295>
```

## Configure peer as number

Use this attribute to configure the Autonomous Systems (AS) that belong to a confederation. A confederation allows an AS to be divided into several ASs. The AS is given a confederation identifier. External BGP (eBGP) routers view only the whole confederation as one AS. Each AS is fully meshed within itself and is visible internally to the confederation.

Attribute Name: peer-as-number

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
    <bgp-instance>
        <bgp-as>1</bgp-as>
        <config>
            <bgp-as>1</bgp-as>
        </config>
        <address-family-vrfs>
        <address-family-vrf>
            <vrf-name>WORD</vrf-name>
            <config>
                <vrf-name>WORD</vrf-name>
                <safi>unicast</safi>
                <afi>ipv4</afi>
            </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
            <confederation>
            <config>
                <peer-as-number>1</peer-as-number> <!-- operation="delete"-->
            </config>
            </confederation>
        </address-family-vrf>
    </address-family-vrfs>
</bgp-instance>

```

```
</bgp-instances>
</bgp>
```

## Command Syntax

```
bgp confederation peers .<1-4294967295>
```

---

## Configure enable dampening

Use this attribute to enable route flap dampening

Attribute Name: enable-dampening

Attribute Type: enum (enable-dampening)

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
    <config>
      <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
        <safi>unicast</safi>
        <afi>ipv4</afi>
      </config>
      <safi>unicast</safi>
      <afi>ipv4</afi>
      <route-flap-dampenings>
      <route-flap-dampening> <!-- operation="delete"-->
        <enable-dampening>enable-dampening</enable-dampening>
        <config>
          <enable-dampening>enable-dampening</enable-dampening>
        </config>
      </route-flap-dampening>
    </route-flap-dampenings>
  </address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>
```

## Command Syntax

```
bgp dampening
```

## Configure reach half life

Use this attribute to configure reachability half-life time for the penalty in minutes for the bgp route dampening. The time for the penalty to decrease to one-half of its current value.

Attribute Name: reach-half-life

Attribute Type: uint32

Default Value: 15

Attribute Range: 1-45

### Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
          <safi>unicast</safi>
          <afi>ipv4</afi>
          <route-flap-dampenings>
            <route-flap-dampening>
              <enable-dampening>enable-dampening</enable-dampening>
              <config>
                <enable-dampening>enable-dampening</enable-dampening>
                <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
              </config>
            </route-flap-dampening>
          </route-flap-dampenings>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

### Command Syntax

```
bgp dampening <1-45>
```

## Configure max suppress time

Use this attribute to configure the value to start suppressing a route for BGP route dampening. When the penalty for a route exceeds the suppress value, the route is suppressed

Attribute Name: max-suppress-time

Attribute Type: uint32

Attribute Range: 1-255

Attribute Name: reach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reuse-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: suppress-penalty

Attribute Type: uint32

Attribute Range: 1-20000

## Netconf edit-config payload

```
<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <route-flap-dampenings>
            <route-flap-dampening>
              <enable-dampening>enable-dampening</enable-dampening>
              <config>
                <enable-dampening>enable-dampening</enable-dampening>
                <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
                <reuse-penalty>1</reuse-penalty> <!-- operation="delete"-->
                <suppress-penalty>1</suppress-penalty> <!-- operation="delete"-->
              </config>
                <max-suppress-time>1</max-suppress-time> <!-- operation="delete"-->
            </route-flap-dampening>
          </route-flap-dampenings>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>
```

```

        </route-flap-dampening>
    </route-flap-dampenings>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening <1-45> <1-20000> <1-20000> <1-255>
```

---

## Configure unreachable half life

Use this attribute to configure un-reachability half-life time for the penalty in minutes for bgp route dampening. The dampening information is purged from the router once the penalty becomes less than half of the reuse limit.

Attribute Name: unreachable-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reach-half-life

Attribute Type: uint32

Attribute Range: 1-45

Attribute Name: reuse-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: suppress-penalty

Attribute Type: uint32

Attribute Range: 1-20000

Attribute Name: max-suppress-time

Attribute Type: uint32

Attribute Range: 1-255

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
          </config>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <safi>unicast</safi>
        <afi>ipv4</afi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
    <route-flap-dampenings>
    <route-flap-dampening>
        <enable-dampening>enable-dampening</enable-dampening>
        <config>
            <enable-dampening>enable-dampening</enable-dampening>
            <reach-half-life>1</reach-half-life> <!-- operation="delete"-->
            <reuse-penalty>1</reuse-penalty> <!-- operation="delete"-->
            <suppress-penalty>1</suppress-penalty> <!-- operation="delete"-->
            <max-suppress-time>1</max-suppress-time> <!-- operation="delete"-->
        </config>
        <unreach-half-life>1</unreach-half-life> <!-- operation="delete"-->
    </route-flap-dampening>
</route-flap-dampenings>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening <1-45> <1-20000> <1-20000> <1-255> <1-45>
```

## Configure dampening rmap name

Use this attribute to configure route map to specify criteria for dampening.

Attribute Name: dampening-rmap-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>

```



```

    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
    <route-flap-dampenings>
    <route-flap-dampening>
    <enable-dampening>enable-dampening</enable-dampening>
    <config>
    <enable-dampening>enable-dampening</enable-dampening>
    </config>
    <dampening-rmap-name>WORD</dampening-rmap-name> <!--
operation="delete"-->
    </route-flap-dampening>
  </route-flap-dampenings>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
bgp dampening route-map WORD
```

---

## Configure peer local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          </config>
            <safi>unicast</safi>
            <afi>ipv4</afi>
          <vrf-peers>
            <vrf-peer>

```

```

    <peer-address>CML_IP_ADDR_T</peer-address>
  <config>
    <peer-address>CML_IP_ADDR_T</peer-address>
  </config>
</local-as>
<local-as-list> <!-- operation="delete"-->
  <peer-local-as>1</peer-local-as>
  <config>
    <peer-local-as>1</peer-local-as>
  </config>
</local-as-list>
</local-as>
</vrf-peer>
</vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor local-as <1-4294967295>
```

---

## Configure no prepend local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

Attribute Name: no-prepend-local-as

Attribute Type: empty

Attribute Name: replace-local-as

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
      <address-family-vrfs>
        <address-family-vrf>
          <vrf-name>WORD</vrf-name>
          <config>
            <vrf-name>WORD</vrf-name>
          </config>
        </address-family-vrf>
      </address-family-vrfs>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

        <safi>unicast</safi>
        <afi>ipv4</afi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
    <vrf-peers>
    <vrf-peer>
        <peer-address>CML_IP_ADDR_T</peer-address>
        <config>
            <peer-address>CML_IP_ADDR_T</peer-address>
        </config>
        <local-as>
        <local-as-list>
            <peer-local-as>1</peer-local-as>
            <config>
                <peer-local-as>1</peer-local-as>
                </no-prepend-local-as>
                </replace-local-as>
            </config>
        </local-as-list>
        </local-as>
    </vrf-peer>
    </vrf-peers>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor local-as <1-4294967295> (no-prepend|) (replace-as|)
```

---

## Configure backdoor

network address with backdoor for address family

Attribute Name: backdoor

Attribute Type: uint8

Attribute Name: network-rmap-name

Attribute Type: string

Default Value: NULL

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

    <bgp-as>1</bgp-as>
  </config>
  <address-family-vrfs>
  <address-family-vrf>
    <vrf-name>WORD</vrf-name>
    <config>
      <vrf-name>WORD</vrf-name>
      <safi>unicast</safi>
      <afi>ipv4</afi>
    </config>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </address-family-vrf>
  </address-family-vrfs>
  <network-lists>
  <network-list>
    <local-network-prefix>A.B.C.D</local-network-prefix>
    <config>
      <local-network-prefix>BGP_IP_NETWORK_T</local-network-prefix>
      <network-rmap-name>WORD</network-rmap-name>
    </config>
    </backdoor>
  </network-list>
  </network-lists>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
network (A.B.C.D | A.B.C.D/M) (route-map WORD|) (backdoor|)
```

## Configure local network prefix

network address with backdoor for address family

Attribute Name: backdoor

Attribute Type: uint8

Attribute Name: network-rmap-name

Attribute Type: string

Default Value: NULL

Attribute Range: 1-63

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <bgp-instances>
    <bgp-instance>
      <bgp-as>1</bgp-as>
      <config>
        <bgp-as>1</bgp-as>
      </config>
    </bgp-instance>
  </bgp-instances>
</bgp>

```

```

</config>
<address-family-vrfs>
<address-family-vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
    <safi>unicast</safi>
    <afi>ipv4</afi>
  </config>
  <safi>unicast</safi>
  <afi>ipv4</afi>
<network-lists>
<network-list>
  <local-network-prefix>A.B.C.D</local-network-prefix>
  <config>
    <local-network-prefix>BGP_IP_NETWORK_T</local-network-prefix>
    <network-rmap-name>WORD</network-rmap-name>
  </config>
  </backdoor>
</network-list>
</network-lists>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
network (X:X::X:X/M) (route-map WORD|) (backdoor|)
```

---

## Configure replace local as

Specifies an AS (autonomous system) number to use with BGP neighbor.

Attribute Name: peer-local-as

Attribute Type: uint32

Attribute Range: 1-4294967295

Attribute Name: no-prepend-local-as

Attribute Type: empty

Attribute Name: replace-local-as

Attribute Type: empty

## Netconf edit-config payload

```

<bgp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp">
<bgp-instances>
  <bgp-instance>
    <bgp-as>1</bgp-as>
  <config>

```

```

        <bgp-as>1</bgp-as>
    </config>
    <address-family-vrfs>
    <address-family-vrf>
        <vrf-name>WORD</vrf-name>
        <config>
            <vrf-name>WORD</vrf-name>
            <safi>unicast</safi>
            <afi>ipv4</afi>
        </config>
        <safi>unicast</safi>
        <afi>ipv4</afi>
    <peer-groups>
    <peer-group>
        <peer-group-tag>WORD</peer-group-tag>
        <config>
            <peer-group-tag>WORD</peer-group-tag>
        </config>
        <local-as>
        <local-as-list>
            <peer-local-as>1</peer-local-as>
            <config>
                <peer-local-as>1</peer-local-as>
                </no-prepend-local-as>
                </replace-local-as>
            </config>
        </local-as-list>
        </local-as>
    </peer-group>
</peer-groups>
</address-family-vrf>
</address-family-vrfs>
</bgp-instance>
</bgp-instances>
</bgp>

```

## Command Syntax

```
neighbor WORD local-as <1-4294967295> (no-prepend|) (replace-as|)
```

## clear ip bgp all vrf (VRFNAME|all|default) (description LINE|)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: peer-reset-description

Attribute Type: string

Attribute Range: 1-255

## Netconf RPC payload

```
<ipi-bgp-address-family-vrf_clear-ip-bgp-all-vrf xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <vrf-name>VRFNAME</vrf-name>
  <peer-reset-description>1</peer-reset-description>
</ipi-bgp-address-family-vrf_clear-ip-bgp-all-vrf>
```

## Command Syntax

```
clear ip bgp all vrf (VRFNAME|all|default) (description LINE|)
```

## clear ip bgp vrf WORD (A.B.C.D|X:X::X:X|WORD|WORD) (description LINE|)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: address

Attribute Type: union

Attribute Name: peer-reset-description

Attribute Type: string

Attribute Range: 1-255

## Netconf RPC payload

```
<ipi-bgp-address-family-vrf_clear-ip-bgp-vrf-peer xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-bgp">
  <vrf-name>WORD</vrf-name>
  <address>BGP_HOSTNAME_T</address>
  <peer-reset-description>1</peer-reset-description>
</ipi-bgp-address-family-vrf_clear-ip-bgp-vrf-peer>
```

## Command Syntax

```
clear ip bgp vrf WORD (A.B.C.D|X:X::X:X|WORD|WORD) (description LINE|)
```

# IPI-BGP-VRF

## Configure rd string

Use this attribute to assign a route distinguisher (RD) for the VRF. The route distinguisher value must be a unique value on the router. This attribute creates routing and forwarding tables and specifies the default RD for a VPN. The RD is added to the customers IPv4 prefixes, changing them into globally unique VPN-IPv4 prefixes.

Attribute Name: rd-string

Attribute Type: string

Attribute Range: 1-32

## Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
```

```

<network-instance>
  <instance-name>WORD</instance-name>
  <config>
    <instance-name>WORD</instance-name>
    <instance-type>vrf</instance-type>
  </config>
  <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <bgp-vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp-vrf">
      <config>
        <rd-string>ASN:nn_or_IP-address:nn</rd-string> <!--
operation="delete"-->
      </config>
    </bgp-vrf>
  </vrf>
</network-instance>
</network-instances>

```

## Command Syntax

```
rd ASN:nn_or_IP-address:nn
```

## Configure import map

This attribute assigns a route map to the VRF. This map is applied for routing information imported from another PE or VRF. Use this attribute when an application requires finer control over the routes imported into a VRF than provided by the import and export extended communities. You can filter routes that are eligible for import into a VRF through the use of a route map. The route map can deny access to selected routes from a community that is on the import list.

Attribute Name: import-map

Attribute Type: string

## Netconf edit-config payload

```

<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <bgp-vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp-vrf">
        <config>
          <import-map>WORD</import-map> <!-- operation="delete"-->
        </config>
      </bgp-vrf>
    </vrf>
  </network-instance>
</network-instances>

```



## Command Syntax

```
import map WORD
```

---

## Configure export map

export map name

Attribute Name: export-map

Attribute Type: string

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
      <instance-type>vrf</instance-type>
    </config>
    <instance-type>vrf</instance-type>
    <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
      <bgp-vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp-vrf">
        <config>
          <export-map>WORD</export-map> <!-- operation="delete"-->
        </config>
      </bgp-vrf>
    </vrf>
  </network-instance>
</network-instances>
```

## Command Syntax

```
export map WORD
```

---

## Configure direction

Use this attribute to add a list of import and export route-target extended communities to the VRF. This attribute creates lists of import and export route-target extended communities for the VRF. It specifies a target VPN extended community. All routes with the specific route-target extended community are imported into all VRFs with the same extended community as an import route-target.

Attribute Name: direction

Attribute Type: bits (import|export|both)

### Netconf edit-config payload

```
<network-instances xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-network-
instance">
  <network-instance>
    <instance-name>WORD</instance-name>
    <config>
      <instance-name>WORD</instance-name>
```

```

    <instance-type>vrf</instance-type>
  </config>
  <instance-type>vrf</instance-type>
  <vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrf">
    <bgp-vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bgp-vrf">
      <route-targets>
        <route-target>
          <rt-rd-string>BGP_ROUTE_TARGET_TYPE_T</rt-rd-string>
          <config>
            <rt-rd-string>BGP_ROUTE_TARGET_TYPE_T</rt-rd-string>
          </config>
          <direction>import</direction>
        </route-target>
      </route-targets>
    </bgp-vrf>
  </vrf>
</network-instance>
</network-instances>

```

### Command Syntax

```
route-target (import|export|both) (ASN:nn_or_IP-address:nn|evpn-auto-rt)
```

## IPI-BFD

### Configure notification enabled

Use this attribute to enable or disable BFD SNMP notification.

Attribute Name: notification-enabled

Attribute Type: boolean

Default Value: false

### Netconf edit-config payload

```

<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <global>
    <config>
      <notification-enabled>true</notification-enabled> <!-- operation="delete"-->
    </config>
  </global>
</bfd>

```

### Command Syntax

```
bfd notification (disable|enable)
```

### Configure echo mode enabled

This leaf exists when echo mode is running between the local and remote system. When it does not exist, solely asynchronous mode is active.

Attribute Name: echo-mode-enabled

Attribute Type: empty

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <global>
    <config>
      </echo-mode-enabled><!-- operation="delete"-->
    </config>
  </global>
</bfd>
```

### Command Syntax

```
bfd echo
```

---

## Configure slow tx interval

Use this command to set a BFD slow timer interval.

Attribute Name: slow-tx-interval

Attribute Type: uint32

Default Value: 2000

Attribute Range: 1000-30000

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <global>
    <config>
      <slow-tx-interval>1000</slow-tx-interval> <!-- operation="delete"-->
    </config>
  </global>
</bfd>
```

### Command Syntax

```
bfd slow-timer <1000-30000>
```

---

## Configure detection multiplier

The number of packets that must be missed to declare this session as down. The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.

This command is supported when following feature are enabled BFD-MONO feature enabled

Attribute Name: detection-multiplier

Attribute Type: uint8

Attribute Range: 3-50

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
```

```

<global>
<intervals>
<interval> <!-- operation="delete"-->
  <detection-multiplier>3</detection-multiplier>
  <config>
    <detection-multiplier>3</detection-multiplier>
    <required-minimum-rx-interval>3</required-minimum-rx-interval>
    <desired-minimum-tx-interval>3</desired-minimum-tx-interval>
  </config>
  <required-minimum-rx-interval>3</required-minimum-rx-interval>
  <desired-minimum-tx-interval>3</desired-minimum-tx-interval>
</interval>
</intervals>
</global>
</bfd>

```

## Command Syntax

```
bfd interval <3-999> minrx <3-999> multiplier <3-50>
```

## Configure remote address

The number of packets that must be missed to declare this session as down. The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.

This command is supported when following feature are enabled BFD-MONO feature enabled

Attribute Name: detection-multiplier

Attribute Type: uint8

Attribute Range: 3-50

## Netconf edit-config payload

```

<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
<peers>
<peer>
  <remote-address>A.B.C.D</remote-address>
  <config>
    <remote-address>A.B.C.D</remote-address>
  </config>
</peer>
</peers>
<intervals>
<interval> <!-- operation="delete"-->
  <detection-multiplier>3</detection-multiplier>
  <config>
    <detection-multiplier>3</detection-multiplier>
    <required-minimum-rx-interval>3</required-minimum-rx-interval>
    <desired-minimum-tx-interval>3</desired-minimum-tx-interval>
  </config>
  <required-minimum-rx-interval>50</required-minimum-rx-interval>
  <desired-minimum-tx-interval>50</desired-minimum-tx-interval>
</interval>
</intervals>

```

```

</peer>
</peers>
</bfd>

```

## Command Syntax

```

bfd multihop-peer (A.B.C.D|X:X::X:X) interval <50-999> minrx <50-999> multiplier
<3-50>

```

---

## Configure key string

Use this attribute to specify the key authentication string

Attribute Name: key-string

Attribute Type: string

Attribute Name: key-type

Attribute Type: enum (simple|keyed-sha1|meticulous-keyed-sha1)

Attribute Name: key-id

Attribute Type: uint32

Attribute Range: 0-255

Attribute Name: key-encrypted

Attribute Type: enum (0|1)

## Netconf edit-config payload

```

<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <peers>
    <peer>
      <remote-address>A.B.C.D</remote-address>
      <config>
        <remote-address>A.B.C.D</remote-address>
      </config>
      <authentication>
        <config>
          <key-type>simple</key-type> <!-- operation="delete"-->
          <key-id>0</key-id> <!-- operation="delete"-->
          <key-encrypted>0</key-encrypted> <!-- operation="delete"-->
          <key-string>WORD</key-string> <!-- operation="delete"-->
        </config>
      </authentication>
    </peer>
  </peers>
</bfd>

```

## Command Syntax

```

bfd multihop-peer (A.B.C.D|X:X::X:X) auth type (simple|keyed-sha1|meticulous-keyed-
sha1) key-id <0-255> (0|1) key WORD

```

---

## Configure options

Use this attribute to debug the oamd process.

Attribute Name: options

Attribute Type: bits (events|packets|ipc-error|ipc-event|session|nsm|all)

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <debug>
  <config>
    <options>events</options> <!-- operation="delete"-->
  </config>
</debug>
</bfd>
```

### Command Syntax

```
debug bfd (events|packets|ipc-error|ipc-event|session|nsm|all)
```

---

## snmp restart bfd

### Netconf RPC payload

```
<bfd-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd"/>
```

### Command Syntax

```
snmp restart bfd
```

---

## debug bfd (events|packets|ipc-error|ipc-event|session|nsm|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (events|packets|ipc-error|ipc-event|session|nsm|all)

### Netconf RPC payload

```
<bfd-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <terminal-debug-options>events</terminal-debug-options>
</bfd-terminal-debug-on>
```

### Command Syntax

```
debug bfd (events|packets|ipc-error|ipc-event|session|nsm|all)
```

---

## no debug bfd (events|packets|ipc-error|ipc-event|session|nsm|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (events|packets|ipc-error|ipc-event|session|nsm|all)

### Netconf RPC payload

```
<bfd-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
```

```
<terminal-debug-options>events</terminal-debug-options>
</bfd-terminal-debug-off>
```

## Command Syntax

```
no debug bfd (events|packets|ipc-error|ipc-event|session|nsm|all)
```

---

# IPI-BFD-INTERFACE

---

## Configure bfd disabled

Use this attribute to enable or disable all the BFD sessions on this interface.

Attribute Name: bfd-disabled

Attribute Type: uint8

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </bfd-disabled><!-- operation="delete"-->
    </interface>
  </interfaces>
</bfd>
```

## Command Syntax

```
bfd disable
```

---

## Configure bfd session type

Use this attribute to offload Single HOP BFD sessions to software or hardware.

Attribute Name: bfd-session-type

Attribute Type: enum (hardware|software)

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <bfd-session-type>hardware</bfd-session-type> <!-- operation="delete"-->
    </interface>
  </interfaces>
</bfd>
```

```
</interfaces>
</bfd>
```

## Command Syntax

```
bfd session (hardware|software)
```

---

## Configure detection multiplier

The number of packets that must be missed to declare this session as down. The detection interval for the BFD session is calculated by multiplying the value of the negotiated transmission interval by this value.

This command is supported when following feature are enabled BFD-MONO feature enabled

Attribute Name: detection-multiplier

Attribute Type: uint8

Attribute Range: 3-50

## Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <intervals>
    <interval> <!-- operation="delete"-->
      <detection-multiplier>3</detection-multiplier>
      <config>
        <detection-multiplier>3</detection-multiplier>
        <required-minimum-rx-interval>3</required-minimum-rx-interval>
        <desired-minimum-tx-interval>3</desired-minimum-tx-interval>
      </config>
      <required-minimum-rx-interval>3</required-minimum-rx-interval>
      <desired-minimum-tx-interval>3</desired-minimum-tx-interval>
    </interval>
  </intervals>
</interface>
</interfaces>
</bfd>
```

## Command Syntax

```
bfd interval <3-999> minrx <3-999> multiplier <3-50>
```

---

## Configure ipv4 source

Use this attribute to configure BFD echo packet IPv4 source address

Attribute Name: ipv4-source

Attribute Type: inet:ipv4-address



**Netconf edit-config payload**

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <echo>
    <config>
      <ipv4-source>A.B.C.D</ipv4-source> <!-- operation="delete"-->
    </config>
  </echo>
</interface>
</interfaces>
</bfd>
```

**Command Syntax**

```
echo ipv4 source A.B.C.D
```

---

**Configure name**

Use this attribute to configure BFD echo packet IPv4 source address

Attribute Name: ipv4-source

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <echo>
    <config>
      <ipv4-source>A.B.C.D</ipv4-source> <!-- operation="delete"-->
    </config>
  </echo>
</interface>
</interfaces>
</bfd>
```

**Command Syntax**

```
bfd echo ipv4 source A.B.C.D
```

---

## Configure required minimum tx interval

Use this attribute to configure BFD echo packet transmission interval, in milliseconds

Attribute Name: required-minimum-tx-interval

Attribute Type: uint32

Attribute Range: 50-4294967

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <echo>
        <config>
          <required-minimum-tx-interval>50</required-minimum-tx-interval> <!--
operation="delete"-->
        </config>
      </echo>
    </interface>
  </interfaces>
</bfd>
```

### Command Syntax

```
bfd echo interval <50-4294967>
```

---

## Configure key string

Use this attribute to specify the key authentication string

Attribute Name: key-string

Attribute Type: string

Attribute Name: key-type

Attribute Type: enum (simple|keyed-sha1|meticulous-keyed-sha1)

Attribute Name: key-id

Attribute Type: uint32

Attribute Range: 0-255

Attribute Name: key-encrypted

Attribute Type: enum (0|1)

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
```

```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</authentication>
<config>
  <key-type>simple</key-type> <!-- operation="delete"-->
  <key-id>0</key-id> <!-- operation="delete"-->
  <key-encrypted>0</key-encrypted> <!-- operation="delete"-->
  <key-string>WORD</key-string> <!-- operation="delete"-->
</config>
</authentication>
</interface>
</interfaces>
</bfd>

```

## Command Syntax

```

bfd auth type (simple|keyed-sha1|meticulous-keyed-sha1) key-id <0-255> (0|1) key
WORD

```

---

## Configure session type

BFD session type

Attribute Name: session-type

Attribute Type: enum (singlehop|multihop)

## Netconf edit-config payload

```

<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <sessions>
        <session> <!-- operation="delete"-->
          <session-type>singlehop</session-type>
          <config>
            <session-type>singlehop</session-type>
            <remote-address>A.B.C.D</remote-address>
            <local-address>A.B.C.D</local-address>
          </config>
          <remote-address>A.B.C.D</remote-address>
          <local-address>A.B.C.D</local-address>
        </session>
      </sessions>
    </interface>
  </interfaces>
</bfd>

```

---

## Command Syntax

```
bfd session (A.B.C.D|X:X::X:X) (A.B.C.D|X:X::X:X) (multihop|)
```

---

## Configure administrative down

BFD administrative down session

Attribute Name: administrative-down

Attribute Type: empty

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <sessions>
        <session>
          <session-type>singlehop</session-type>
          <config>
            <session-type>singlehop</session-type>
            <remote-address>A.B.C.D</remote-address>
            <local-address>A.B.C.D</local-address>
          </config>
          <remote-address>A.B.C.D</remote-address>
          <local-address>A.B.C.D</local-address>
          </administrative-down><!-- operation="delete"-->
        </session>
      </sessions>
    </interface>
  </interfaces>
</bfd>
```

## Command Syntax

```
bfd session (A.B.C.D|X:X::X:X) (A.B.C.D|X:X::X:X) (multihop|) admin-down
```

---

## Configure non persistent

BFD non persistent session

Attribute Name: non-persistent

Attribute Type: empty

### Netconf edit-config payload

```
<bfd xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-bfd">
  <interfaces>
    <interface>
      <name>WORD</name>
```

```

<config>
  <name>WORD</name>
</config>
<sessions>
<session>
  <session-type>singlehop</session-type>
  <config>
    <session-type>singlehop</session-type>
    <remote-address>A.B.C.D</remote-address>
    <local-address>A.B.C.D</local-address>
  </config>
  <remote-address>A.B.C.D</remote-address>
  <local-address>A.B.C.D</local-address>
  </non-persistent><!-- operation="delete"-->
</session>
</sessions>
</interface>
</interfaces>
</bfd>

```

## Command Syntax

```
bfd session (A.B.C.D|X:X::X:X) (A.B.C.D|X:X::X:X) (multihop|) non-persistent
```

## IPI-VRRP

### Configure disable virtual router mac address

Use this attribute to enable or disable Virtual MAC (VMAC). This affects all VRRP groups in a router. On a single network segment, multiple VRRP groups can be configured, each using a different VMAC. The use of VMAC addressing allows for faster switchover when a backup router assumes the master role. When this attribute is used to enable a VMAC, the virtual router forwards packets with a special-purpose multicast VMAC address (0:0:5e:0:01:VR\_ID). Otherwise, it forwards with interface physical address. The VMAC address is assigned to a router interface at the time the VRRP group is enabled in the router.

Attribute Name: disable-virtual-router-mac-address

Attribute Type: empty

### Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <global>
    <config>
      </disable-virtual-router-mac-address><!-- operation="delete"-->
    </config>
  </global>
</vrrp>

```

## Command Syntax

```
vrrp vmac disable
```

---

## Configure vrrp v2 compatible

Use this attribute to enable or disable backward-compatibility feature. When enabled, both VRRPv3 and VRRPv2 interoperation are supported.

Attribute Name: vrrp-v2-compatible

Attribute Type: empty

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <global>
    <config>
      </vrrp-v2-compatible><!-- operation="delete"-->
    </config>
  </global>
</vrrp>
```

### Command Syntax

```
vrrp compatible-v2 enable
```

---

## Configure ipv4 exclude pseudo header

This command excludes the pseudo-header in IPv4 VRRPv3 checksum calculation on the VRRP group

Attribute Name: ipv4-exclude-pseudo-header

Attribute Type: empty

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <global>
    <config>
      </ipv4-exclude-pseudo-header><!-- operation="delete"-->
    </config>
  </global>
</vrrp>
```

### Command Syntax

```
vrrp ipv4-exclude-pseudo-header enable
```

---

## Configure options

use this attribute to specify debugging options for VRRP

Attribute Name: options

Attribute Type: bits (all|packet|events|packet send|packet rcv)

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <debug>
    <config>
```

```

    <options>14</options> <!-- operation="delete"-->
</config>
</debug>
</vrrp>

```

## Command Syntax

```
debug vrrp
```

---

## Configure interface name

Use this attribute to configure an VRRP routing process for an interface.

Attribute Name: interface-name

Attribute Type: string

## Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<ipv4-instances>
<ipv4-instance>
    <virtual-router-id>1</virtual-router-id>
    <config>
        <virtual-router-id>1</virtual-router-id>
    </config>
</interfaces>
<interface> <!-- operation="delete"-->
    <interface-name>IFNAME</interface-name>
    <config>
        <interface-name>WORD</interface-name>
    </config>
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

## Command Syntax

```
router vrrp <1-255> IFNAME
```

---

## Configure disable preempt mode

Use this attribute to configure preempt mode. If set to true, the highest priority backup is always the master when the default master is unavailable. If set to false, a higher priority backup does not preempt a lower priority backup which is acting as master

Attribute Name: disable-preempt-mode

Attribute Type: empty

## Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<ipv4-instances>

```

```

<ipv4-instance>
  <virtual-router-id>1</virtual-router-id>
  <config>
    <virtual-router-id>1</virtual-router-id>
  </config>
</interfaces>
<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  </disable-preempt-mode><!-- operation="delete"-->
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

## Command Syntax

```
preempt-mode false
```

---

## Configure disable accept mode

Use this attribute to enable accept mode for the session

Attribute Name: disable-accept-mode

Attribute Type: empty

## Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      </disable-accept-mode><!-- operation="delete"-->
    </interface>
  </interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```



## Command Syntax

```
accept-mode false
```

---

## Configure virtual router id

Use this attribute to enable or disable the backward-compatibility feature

Attribute Name: vrrp-v2-compatible

Attribute Type: empty

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
        </vrrp-v2-compatible><!-- operation="delete"-->
      </config>
    </interface>
  </interfaces>
</vrrp>
```

## Command Syntax

```
v2-compatible
```

---

## Configure authentication data

Use this attribute to include authentication simple text

Attribute Name: authentication-data

Attribute Type: string

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
```

```

<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <authentication-data>TEXT-STRING</authentication-data> <!--
operation="delete"-->
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

### Command Syntax

```
authentication text TEXT-STRING
```

---

## Configure primary ip address

Use this attribute to set the operational-ip address for the virtual router

Attribute Name: primary-ip-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <primary-ip-address>A.B.C.D</primary-ip-address> <!-- operation="delete"-->
    </interface>
  </interfaces>
</vrrp>

```

### Command Syntax

```
operational-ip A.B.C.D
```

---

## Configure mlag active standby

Use this attribute to set active-standby mlag mode

Attribute Name: mlag-active-standby

Attribute Type: empty

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
        </mlag-active-standby><!-- operation="delete"-->
      </config>
    </interface>
  </interfaces>
</vrrp>
```

### Command Syntax

```
mlag active-standby
```

---

## Configure priority

Use this attribute to configure the VRRP router priority within the virtual router. Priority determines the role that each VRRP router plays and what happens if the master virtual router fails. If a VRRP router owns the IP address of the virtual router and the IP address of the physical interface, this router functions as the master virtual router

Attribute Name: priority

Attribute Type: uint8

Attribute Range: 1-254

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
```

```

    <interface-name>WORD</interface-name>
  </config>
  <priority>1</priority> <!-- operation="delete"-->
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

### Command Syntax

```
priority <1-254>
```

---

## Configure preempt delay

Use this attribute to set a switch-back delay timer for the master VRRP router. This feature prevents the original master VRRP router from transitioning back to the master state after coming back online until the configured delay timer has expired.

Attribute Name: preempt-delay

Attribute Type: uint32

Attribute Range: 1-500000

### Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interface>
    <interface-name>IFNAME</interface-name>
    <config>
      <interface-name>WORD</interface-name>
      <preempt-delay>1</preempt-delay> <!-- operation="delete"-->
    </config>
  </interface>
</vrrp>

```

### Command Syntax

```
switch-back-delay <1-500000>
```

---

## Configure advertisement interval

Use this attribute to configure the advertisement interval of a virtual router. This is the length of time, in seconds, between each advertisement sent from the master to its backup(s). The master virtual router sends VRRP

advertisements to other VRRP routers in the same group. The advertisements communicate the priority and state of the master virtual router. The VRRP advertisements are encapsulated in IP packets and sent to the multicast address assigned to the VRRP group (224.0.0.18). Advertisements are sent every second by default.

Attribute Name: advertisement-interval

Attribute Type: uint16

Default Value: 100

Attribute Range: 5-4095

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
        <advertisement-interval>5</advertisement-interval> <!-- operation="delete"-->
      </config>
    </interface>
  </interfaces>
</vrrp>
```

### Command Syntax

```
advertisement-interval <5-4095>
```

## Configure enable

Use this attribute to enable a VRRP session on the router (to make it participate in virtual routing). To make any changes to the VRRP configuration, first disable the router from participating in virtual routing using the disable command

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
</vrrp>
```

```

<interfaces>
<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <protocol-enable>
  <config>
    </enable><!-- operation="delete"-->
  </config>
</protocol-enable>
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

## Command Syntax

enable

---

## Configure ip address owner

Use this attribute to set the virtual IP address for the VRRP virtual router as VRRP Owner. This is the IP address used by end hosts to address their default gateway.

Attribute Name: ip-address-owner

Attribute Type: boolean

Attribute Name: virtual-ip-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<ipv4-instances>
<ipv4-instance>
  <virtual-router-id>1</virtual-router-id>
  <config>
    <virtual-router-id>1</virtual-router-id>
  </config>
</interfaces>
<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <virtual-ip>
  <config>
    <virtual-ip-address>A.B.C.D</virtual-ip-address>
    <ip-address-owner>true</ip-address-owner>
  </config>

```

```

</virtual-ip>
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

## Command Syntax

```
virtual-ip A.B.C.D (owner|)
```

---

## Configure interface tracking name

Use this command to enable the VRRP circuit failover feature.

Attribute Name: interface-tracking-name

Attribute Type: string

Attribute Name: priority-decrement

Attribute Type: uint8

Attribute Range: 1-253

## Netconf edit-config payload

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<ipv4-instances>
<ipv4-instance>
  <virtual-router-id>1</virtual-router-id>
  <config>
    <virtual-router-id>1</virtual-router-id>
  </config>
</interfaces>
<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <interfaces-tracking>
  <interface-tracking> <!-- operation="delete"-->
    <interface-tracking-name>IFNAME</interface-tracking-name>
    <config>
      <interface-tracking-name>WORD</interface-tracking-name>
      <priority-decrement>1</priority-decrement>
    </config>
  </interface-tracking>
</interfaces-tracking>
</interface>
</interfaces>
</ipv4-instance>
</ipv4-instances>
</vrrp>

```

## Command Syntax

```
circuit-failover IFNAME <1-253>
```

---

## Configure tracking id

Use this command to enable the VRRP object tracking feature.

This command is supported when following feature are enabled HAVE\_OBJ\_TRACKING

Attribute Name: tracking-id

Attribute Type: uint16

Attribute Name: decrement

Attribute Type: uint8

Attribute Range: 1-253

## Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv4-instances>
    <ipv4-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv4-instance>
  </ipv4-instances>
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <objects-tracking>
        <object-tracking> <!-- operation="delete"-->
          <tracking-id>0</tracking-id>
          <config>
            <tracking-id>1</tracking-id>
            <decrement>1</decrement>
          </config>
        </object-tracking>
      </objects-tracking>
    </interface>
  </interfaces>
</vrrp>
```

## Command Syntax

```
track <0-65535> decrement <1-253>
```



---

## Configure virtual ip address

VRRP Virtual IPV6 address

This command is supported when following feature are enabled IPV6 feature

Attribute Name: virtual-ip-address

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```
<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <ipv6-instances>
    <ipv6-instance>
      <virtual-router-id>1</virtual-router-id>
      <config>
        <virtual-router-id>1</virtual-router-id>
      </config>
    </ipv6-instance>
  </ipv6-instances>
  <interface>
    <interface-name>IFNAME</interface-name>
    <config>
      <interface-name>WORD</interface-name>
    </config>
    <virtual-ip-addresses>
      <virtual-ip-address> <!-- operation="delete"-->
        <virtual-ip-address>X:X::X:X</virtual-ip-address>
        <config>
          <virtual-ip-address>X:X::X:X</virtual-ip-address>
        </config>
      </virtual-ip-address>
    </virtual-ip-addresses>
  </interface>
</vrrp>
```

### Command Syntax

```
virtual-ipv6 X:X::X:X
```

---

## Configure priority decrement

Use this command to enable the VRRP circuit failover feature.

Attribute Name: interface-tracking-name

Attribute Type: string

Attribute Name: priority-decrement

Attribute Type: uint8

Attribute Range: 1-253

**Netconf edit-config payload**

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<ipv6-instances>
<ipv6-instance>
  <virtual-router-id>1</virtual-router-id>
  <config>
    <virtual-router-id>1</virtual-router-id>
  </config>
</interfaces>
<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <interfaces-tracking>
  <interface-tracking> <!-- operation="delete"-->
    <interface-tracking-name>IFNAME</interface-tracking-name>
    <config>
      <interface-tracking-name>WORD</interface-tracking-name>
      <priority-decrement>1</priority-decrement>
    </config>
  </interface-tracking>
</interfaces-tracking>
</interface>
</interfaces>
</ipv6-instance>
</ipv6-instances>
</vrrp>

```

**Command Syntax**

```
circuit-failover IFNAME <1-253>
```

**Configure decrement**

Use this command to enable the VRRP object tracking feature.

This command is supported when following feature are enabled HAVE\_OBJ\_TRACKING

Attribute Name: tracking-id

Attribute Type: uint16

Attribute Name: decrement

Attribute Type: uint8

Attribute Range: 1-253

**Netconf edit-config payload**

```

<vrrp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<ipv6-instances>
<ipv6-instance>
  <virtual-router-id>1</virtual-router-id>

```

```
<config>
  <virtual-router-id>1</virtual-router-id>
</config>
<interfaces>
<interface>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <objects-tracking>
  <object-tracking> <!-- operation="delete"-->
    <tracking-id>0</tracking-id>
    <config>
      <tracking-id>1</tracking-id>
      <decrement>1</decrement>
    </config>
  </object-tracking>
</objects-tracking>
</interface>
</interfaces>
</ipv6-instance>
</ipv6-instances>
</vrrp>
```

### Command Syntax

```
track <0-65535> decrement <1-253>
```

---

## snmp restart vrrp

### Netconf RPC payload

```
<vrrp-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp"/>
```

### Command Syntax

```
snmp restart vrrp
```

---

## clear vrrp global statistics

### Netconf RPC payload

```
<vrrp-clear-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp"/>
```

### Command Syntax

```
clear vrrp global statistics
```

---

## clear vrrp ipv4 statistics

### Netconf RPC payload

```
<vrrp-clear-ipv4-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp"/>
```

### Command Syntax

```
clear vrrp ipv4 statistics
```

---

## clear vrrp ipv6 statistics

### Netconf RPC payload

```
<vrrp-clear-ipv6-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp"/>
```

### Command Syntax

```
clear vrrp ipv6 statistics
```

---

## clear vrrp ipv4 statistics <1-255> IFNAME

Attribute Name: vrrp-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<vrrp-clear-session-ipv4-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">  
  <vrrp-id>1</vrrp-id>  
  <interface-name>IFNAME</interface-name>  
</vrrp-clear-session-ipv4-statistics>
```

### Command Syntax

```
clear vrrp ipv4 statistics <1-255> IFNAME
```

---

## clear vrrp ipv6 statistics <1-255> IFNAME

Attribute Name: vrrp-id

Attribute Type: uint8

Attribute Range: 1-255

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<vrrp-clear-session-ipv6-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-vrrp">
  <vrrp-id>1</vrrp-id>
  <interface-name>IFNAME</interface-name>
</vrrp-clear-session-ipv6-statistics>
```

### Command Syntax

```
clear vrrp ipv6 statistics <1-255> IFNAME
```

---

## debug vrrp

### Netconf RPC payload

```
<vrrp-terminal-debug-all-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
vrrp"/>
```

### Command Syntax

```
debug vrrp
```

---

## no debug vrrp

### Netconf RPC payload

```
<vrrp-terminal-debug-all-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
vrrp"/>
```

### Command Syntax

```
no debug vrrp
```

---

## debug vrrp (all|packet|events|packet send|packet recv)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|packet|events|packet send|packet recv)

### Netconf RPC payload

```
<vrrp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
  <terminal-debug-options>all</terminal-debug-options>
</vrrp-terminal-debug-on>
```

### Command Syntax

```
debug vrrp (all|packet|events|packet send|packet recv)
```

---

## no debug vrrp (all|packet|events|packet send|packet recv)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|packet|events|packet send|packet recv)

## Netconf RPC payload

```
<vrrp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vrrp">
<terminal-debug-options>all</terminal-debug-options>
</vrrp-terminal-debug-off>
```

## Command Syntax

```
no debug vrrp (all|packet|events|packet send|packet recv)
```

---

# IPI-PREFIX-LIST

---

## Configure prefix list name

prefix-list name

Attribute Name: prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
<prefix> <!-- operation="delete"-->
  <prefix-list-type>ip</prefix-list-type>
  <config>
    <prefix-list-type>ip</prefix-list-type>
    <prefix-list-name>WORD</prefix-list-name>
  </config>
  <prefix-list-name>WORD</prefix-list-name>
</prefix>
</prefixes>
```

## Command Syntax

```
ip prefix-list WORD
```

---

## Configure prefix list type

prefix-list name

Attribute Name: prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
<prefix> <!-- operation="delete"-->
  <prefix-list-type>ipv6</prefix-list-type>
  <config>
    <prefix-list-type>ipv6</prefix-list-type>
    <prefix-list-name>WORD</prefix-list-name>
  </config>
  <prefix-list-name>WORD</prefix-list-name>
</prefix>
</prefixes>
```

```
</prefix>
</prefixes>
```

## Command Syntax

```
ipv6 prefix-list WORD
```

---

## Configure description

Up to 80 characters describing this prefix-list

Attribute Name: description

Attribute Type: string

Attribute Range: 1-80

## Netconf edit-config payload

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
    <description>LINE</description> <!-- operation="delete"-->
  </prefix>
</prefixes>
```

## Command Syntax

```
description LINE
```

---

## Configure prefix addr

Either IP address mask and length of the prefix list mask or Take all packets of any length. This parameter is the same as using 0.0.0.0/0 le 32 for A.B.C.D/M.

Attribute Name: prefix-addr

Attribute Type: union

## Netconf edit-config payload

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  <prefix-entries>
    <prefix-entry>
      <sequence-id>1</sequence-id>
```

```

<config>
  <sequence-id>1</sequence-id>
</config>
<ipv4>
<entry>
  <prefix-addr>any</prefix-addr>
  <config>
    <prefix-addr>any</prefix-addr>
    <action>deny</action>
  </config>
  <action>deny</action>
</entry>
</ipv4>
</prefix-entry>
</prefix-entries>
</prefix>
</prefixes>

```

## Command Syntax

```
(seq <1-4294967295>|) (deny|permit) any
```

---

## Configure sequence id

Either IP address mask and length of the prefix list mask or Take all packets of any length. This parameter is the same as using 0.0.0.0/0 le 32 for A.B.C.D/M.

Attribute Name: prefix-addr

Attribute Type: enum (any)

## Netconf edit-config payload

```

<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  </prefix>
</prefixes>
<prefix-entry>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
  </config>
  <ipv4>
  <entry>
    <prefix-addr>any</prefix-addr>
    <config>
      <prefix-addr>any</prefix-addr>
      <action>deny</action>
    </config>
  </entry>
</ipv4>
</prefix-entry>

```



```

        </config>
        <action>deny</action>
    </entry>
</ipv4>
</prefix-entry>
</prefix-entries>
</prefix>
</prefixes>

```

## Command Syntax

```
(seq <1-4294967295>|) (deny|permit)
```

---

## Configure maximum prefix length match

Maximum prefix length match

Attribute Name: maximum-prefix-length-match

Attribute Type: uint8

Attribute Range: 0-32

Attribute Name: minimum-prefix-length-match

Attribute Type: uint8

Attribute Range: 0-32

## Netconf edit-config payload

```

<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  </prefix>
  <prefix-entries>
    <prefix-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <entry>
          <prefix-addr>any</prefix-addr>
          <config>
            <prefix-addr>any</prefix-addr>
            <action>deny</action>
            <minimum-prefix-length-match>0</minimum-prefix-length-match> <!--
operation="delete"-->
          </config>
          <action>deny</action>
        </entry>
      </ipv4>
    </prefix-entry>
  </prefix-entries>
</prefixes>

```

```

        <maximum-prefix-length-match>0</maximum-prefix-length-match> <!--
operation="delete"-->
    </entry>
</ipv4>
</prefix-entry>
</prefix-entries>
</prefix>
</prefixes>

```

## Command Syntax

```
(seq <1-4294967295>|) (deny|permit) ge <0-32> le <0-32>
```

---

## Configure minimum prefix length match

Minimum prefix length match

Attribute Name: minimum-prefix-length-match

Attribute Type: uint8

Attribute Range: 0-32

Attribute Name: maximum-prefix-length-match

Attribute Type: uint8

Attribute Range: 0-32

## Netconf edit-config payload

```

<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  </prefix>
  <prefix-entries>
    <prefix-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <entry>
          <prefix-addr>any</prefix-addr>
          <config>
            <prefix-addr>any</prefix-addr>
            <action>deny</action>
            <maximum-prefix-length-match>0</maximum-prefix-length-match> <!--
operation="delete"-->
          </config>
          <action>deny</action>

```

```

        <minimum-prefix-length-match>0</minimum-prefix-length-match> <!--
operation="delete"-->
    </entry>
</ipv4>
</prefix-entry>
</prefix-entries>
</prefix>
</prefixes>

```

## Command Syntax

```
(seq <1-4294967295>|) (deny|permit) le <0-32> ge <0-32>
```

---

## Configure action

Minimum prefix length match

Attribute Name: minimum-prefix-length-match

Attribute Type: uint8

Attribute Range: 0-32

## Netconf edit-config payload

```

<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  </prefix-entries>
  <prefix-entry>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
    </config>
    <ipv4>
      <entry>
        <prefix-addr>any</prefix-addr>
        <config>
          <prefix-addr>any</prefix-addr>
          <action>deny</action>
        </config>
        <action>deny</action>
      </entry>
    </ipv4>
  </prefix-entry>
</prefix-entries>
</prefix>
  <minimum-prefix-length-match>0</minimum-prefix-length-match> <!--
operation="delete"-->
  </entry>
</ipv4>
</prefix-entry>
</prefix-entries>
</prefix>

```

```
</prefixes>
```

## Command Syntax

```
(seq <1-4294967295>|) (deny|permit) ge <0-32>
```

---

## Configure exact prefix length match

Exact prefix length match

Attribute Name: exact-prefix-length-match

Attribute Type: uint8

Attribute Range: 0-32

## Netconf edit-config payload

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  </prefix>
  <prefix-entries>
    <prefix-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <entry>
          <prefix-addr>any</prefix-addr>
          <config>
            <prefix-addr>any</prefix-addr>
            <action>deny</action>
          </config>
          <action>deny</action>
          <exact-prefix-length-match>0</exact-prefix-length-match> <!--
operation="delete"-->
        </entry>
      </ipv4>
    </prefix-entry>
  </prefix-entries>
</prefix>
</prefixes>
```

## Command Syntax

```
(seq <1-4294967295>|) (deny|permit) eq <0-32>
```

## Configure ipv6 prefix addr

Either IPv6 address mask and length of the prefix list mask or This is the same as specifying ::/0 for X:X::X:X/M

This command is supported when following feature are enabled ipv6 feature

Attribute Name: ipv6-prefix-addr

Attribute Type: union

### Netconf edit-config payload

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <prefix>
    <prefix-list-type>ip</prefix-list-type>
    <config>
      <prefix-list-type>ip</prefix-list-type>
      <prefix-list-name>WORD</prefix-list-name>
    </config>
    <prefix-list-name>WORD</prefix-list-name>
  </prefix>
  <prefix-entries>
    <prefix-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv6>
        <entry> <!-- operation="delete"-->
          <ipv6-prefix-addr>any</ipv6-prefix-addr>
          <config>
            <ipv6-prefix-addr>any</ipv6-prefix-addr>
            <action>deny</action>
          </config>
          <action>deny</action>
        </entry>
      </ipv6>
    </prefix-entry>
  </prefix-entries>
</prefixes>
```

### Command Syntax

```
(seq <1-4294967295>|) (deny|permit) any
```

## Configure disable ipv4 sequence display

Use this attribute to configure prefix list sequence number.Include and exclude sequence numbers in nonvolatile generation (NVGEN).

Attribute Name: disable-ipv4-sequence-display

Attribute Type: empty

---

**Netconf edit-config payload**

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <global>
    <config>
      </disable-ipv4-sequence-display><!-- operation="delete"-->
    </config>
  </global>
</prefixes>
```

**Command Syntax**

```
no ip prefix-list sequence-number
```

---

**Configure disable ipv6 sequence display**

Use this attribute to configure prefix list sequence number. Include and exclude sequence numbers in nonvolatile generation (NVGEN).

Attribute Name: disable-ipv6-sequence-display

Attribute Type: empty

**Netconf edit-config payload**

```
<prefixes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list">
  <global>
    <config>
      </disable-ipv6-sequence-display><!-- operation="delete"-->
    </config>
  </global>
</prefixes>
```

**Command Syntax**

```
no ipv6 prefix-list sequence-number
```

---

**clear ip prefix-list****Netconf RPC payload**

```
<clear-prefix-list-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list"/>
```

**Command Syntax**

```
clear ip prefix-list
```

---

**clear ipv6 prefix-list****Netconf RPC payload**

```
<clear-prefix-list-ipv6-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-list"/>
```

---

## Command Syntax

```
clear ipv6 prefix-list
```

---

### clear ip prefix-list WORD (A.B.C.D/M|)

Attribute Name: prefix-list-name

Attribute Type: string

Attribute Name: prefix

Attribute Type: string

#### Netconf RPC payload

```
<clear-ipv4-prefix-list xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-  
list">  
  <prefix-list-name>WORD</prefix-list-name>  
  <prefix>A.B.C.D/M</prefix>  
</clear-ipv4-prefix-list>
```

## Command Syntax

```
clear ip prefix-list WORD (A.B.C.D/M|)
```

---

### clear ipv6 prefix-list WORD (X:X::X:X/M|)

Attribute Name: prefix-list-name

Attribute Type: string

Attribute Name: prefix

Attribute Type: string

#### Netconf RPC payload

```
<clear-ipv6-prefix-list xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-prefix-  
list">  
  <prefix-list-name>WORD</prefix-list-name>  
  <prefix>X:X::X:X/M</prefix>  
</clear-ipv6-prefix-list>
```

## Command Syntax

```
clear ipv6 prefix-list WORD (X:X::X:X/M|)
```

---

## IPI-ISIS

---

### Configure vrf name

VRF Name to associate with this instance

Attribute Name: vrf-name

Attribute Type: string

---

**Netconf edit-config payload**

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
  <vrf-name>WORD</vrf-name>
</isis-instance>
</isis-instances>
</isis>
```

**Command Syntax**

```
router isis WORD WORD
```

---

**Configure instance**

Use this attribute to initiate an ISIS routing instance. Configure at least one NET to start routing.

Attribute Name: instance

Attribute Type: string

Attribute Name: vrf-name

Attribute Type: string

**Netconf edit-config payload**

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance> <!-- operation="delete"-->
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
    <vrf-name>WORD</vrf-name>
  </config>
</isis-instance>
</isis-instances>
</isis>
```

**Command Syntax**

```
router isis WORD
```

---

**Configure disable gr capability**

Use this attribute to enable the GR

Attribute Name: disable-gr-capability

Attribute Type: uint8



---

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
  </disable-gr-capability><!-- operation="delete"-->
</isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
no capability restart graceful
```

---

## Configure disable adjacency check

Use this attribute to configure the policy of adjacency based on the protocol related TLVs in the ISIS Hello packet. ISIS checks adjacency with protocol related TLVs including Protocols Supported TLV or IP Interface Address TLV by default. The command with no parameter disables this check.

Attribute Name: disable-adjacency-check

Attribute Type: uint8

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
  </disable-adjacency-check><!-- operation="delete"-->
</isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
no adjacency-check
```

---

## Configure authentication send only

Use this attribute to set the send-only option at the instance level. Use this command before configuring the authentication mode and authentication key-chain, so that the implementation of authentication goes smoothly. That is, the routers will have more time for the keys to be configured on each router if authentication is inserted only on the packets being sent, not checked on packets being received. After all routers that must communicate are configured with this command, enable the authentication mode and key chain on each router.

Attribute Name: authentication-send-only

Attribute Type: enum (level-1-only|level-2-only|level-1-2)

Default Value: level-1-2

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <authentication-send-only>3</authentication-send-only> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

### Command Syntax

```
authentication send-only level-1
```

---

## Configure distance

Use this attribute to set the administrative distance for all IPv4 routes.

Attribute Name: distance

Attribute Type: uint8

Default Value: 115

Attribute Range: 1-255

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <distance>1</distance> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

### Command Syntax

```
distance <1-255>
```

---

## Configure dynamic host name

Use this attribute to configure the hostname to be advertised for an ISIS instance using the dynamic hostname exchange mechanism (RFC 2763) and system-ID-to-hostname translation. This command configures a hostname to be

used for the Dynamic Hostname Exchange Mechanism and System-ID tohostname translation. Use the routing area tag as the hostname, not the router.s global hostname

Attribute Name: dynamic-host-name

Attribute Type: enum (dynamic-hostname|area-tag)

Default Value: dynamic-hostname

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <dynamic-host-name>dynamic-hostname</dynamic-host-name> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

### Command Syntax

```
dynamic-hostname (area-tag|)
```

## Configure ignore lsp errors

Use this attribute to ignore LSPs with checksum errors. By default, ISIS validates checksum for LSP whenever it receives LSPs and if the checksum has an error, the LSP will be dropped. Configuring this command to ignore the LSP checksum error and treat it as if checksum is passed.

Attribute Name: ignore-lsp-errors

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      </ignore-lsp-errors><!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

### Command Syntax

```
ignore-lsp-errors
```

---

## Configure lfa hold timer

LFA terminate-hold-on interval

Attribute Name: lfa-hold-timer

Attribute Type: int32

Default Value: 1000

Attribute Range: 100-100000

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <lfa-hold-timer>100</lfa-hold-timer> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

### Command Syntax

```
fast-reroute terminate-hold-on interval <100-100000>
```

---

## Configure level capability

Use this attribute to set the IS to the specified level of routing. Changing is-type brings down, then brings up a particular level of routing. There is a limitation: Only one ISIS instance can run Level-2 routing (either Level-2 only IS, or Level-1-2 IS)

Attribute Name: level-capability

Attribute Type: enum (level-1|level-2-only|level-1-2)

Default Value: level-1-2

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <level-capability>level-1-2</level-capability> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

## Command Syntax

```
is-type (level-1|level-2-only|level-1-2)
```

---

## Configure incremental spf levels

Use this attribute to enable incremental SPF for a routing process

Attribute Name: incremental-spf-levels

Attribute Type: enum (level-1|level-2-only|level-1-2)

Default Value: level-1-2

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <incremental-spf-levels>level-1-2</incremental-spf-levels> <!--
operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

## Command Syntax

```
ispf (level-1|level-2-only|level-1-2|)
```

---

## Configure priority tag

Use this attribute to set a high priority tag value

Attribute Name: priority-tag

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <priority-tag>1</priority-tag> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

## Command Syntax

```
ip route high-priority tag <1-4294967295>
```

---

## Configure enable bfd all interfaces

Use this attribute to enable the Bidirectional Forwarding Detection (BFD) feature on the interfaces enabled with this ISIS instance. This command sets BFD fall-over check for all the neighbors under specified process.

Attribute Name: enable-bfd-all-interfaces

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      </enable-bfd-all-interfaces><!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

## Command Syntax

```
bfd all-interfaces
```

---

## Configure maximum area addresses

Use this attribute to set the maximum number of ISIS areas that can be configured on this router with the net command. By default, ISIS permits a maximum of three areas that can be defined on a router.

Attribute Name: maximum-area-addresses

Attribute Type: uint8

Default Value: 3

Attribute Range: 3-254

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <maximum-area-addresses>3</maximum-area-addresses> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

---

## Command Syntax

```
max-area-address <3-254>
```

---

## Configure context name

Use this attribute to set the SNMP context name for ISIS instance.

Attribute Name: context-name

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <context-name>WORD</context-name> <!-- operation="delete"-->
    </isis-instance>
  </isis-instances>
</isis>
```

## Command Syntax

```
snmp context-name WORD
```

---

## Configure area password

Use this attribute to set the authentication password for the Level-1 area and to set authentication on Level-1 SNP PDUs. This command enables authentication when receiving and sending LSP and SNP PDU in Level-1 areas. Area password must be the same for all the ISIS routers in the same area

Attribute Name: area-password

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <area-authentication>
      <config>
        <area-password>WORD</area-password>
      </config>
    </area-authentication>
  </isis-instances>
</isis>
```

```

</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
area-password WORD
```

---

## Configure sequence number packet

Use this attribute to set the authentication password for the Level-1 area and to set authentication on Level-1 SNP PDUs. This command enables authentication when receiving and sending LSP and SNP PDU in Level-1 areas. Area password must be the same for all the ISIS routers in the same area

Attribute Name: sequence-number-packet

Attribute Type: enum (send-only|validate)

Attribute Name: area-password

Attribute Type: string

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <area-authentication>
      <config>
        <area-password>WORD</area-password> <!-- operation="delete"-->
        <sequence-number-packet>send-only</sequence-number-packet> <!--
operation="delete"-->
      </config>
    </area-authentication>
  </isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
area-password WORD authenticate snp (send-only|validate)
```

---

## Configure net

Use this attribute to add a Network Entity Title (NET) for the instance. On a router running ISIS, a NET can be 8 to 20 bytes in length. The last byte is always the n-selector, and must be zero. The n-selector indicates no transport entity, and means that the packet is for the routing software of the system. The six bytes directly preceding the n-selector are the system ID. The system ID length is a fixed size and cannot be changed. The system ID must be unique throughout each area (Level 1) and throughout the backbone (Level 2). The bytes preceding the system ID are the area ID, which can be from 1 - 13 bytes in length. By default, a maximum of three NETs per router are allowed with a different area ID but the system ID should be the same for all NETs. You can increase the number of area IDs per system ID with the max-area-address command.



Attribute Name: net

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <network-entity-title>
      <config>
        <net>NET</net> <!-- operation="delete"-->
      </config>
    </network-entity-title>
  </isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
net NET
```

---

## Configure domain password

Use this attribute to set the authentication password for the Level-2 domain, and optionally, the authentication password on Level-2 SNP PDUs. Configuring this command to enable authentication when receiving and sending LSP and SNP PDU in Level-2 domain. Domain password must be the same in Level-2 domain.

Attribute Name: domain-password

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <domain-authentication>
      <config>
        <domain-password>WORD</domain-password>
      </config>
    </domain-authentication>
  </isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
domain password WORD
```

## Configure domain snp

Use this attribute to set the authentication password for the Level-2 domain, and optionally, the authentication password on Level-2 SNP PDUs. Configuring this command to enable authentication when receiving and sending LSP and SNP PDU in Level-2 domain. Domain password must be the same in Level-2 domain.

Attribute Name: domain-snp

Attribute Type: enum (send-only|validate)

Attribute Name: domain-password

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <domain-authentication>
      <config>
        <domain-password>WORD</domain-password> <!-- operation="delete"-->
        <domain-snp>send-only</domain-snp> <!-- operation="delete"-->
      </config>
    </domain-authentication>
  </isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
domain password WORD authenticate snp (send-only|validate)
```

## Configure style

Use this attribute to configure the ISIS metric style

Attribute Name: style

Attribute Type: enum (narrow|wide|transition|narrow transition|wide transition)

Attribute Name: level-number

Attribute Type: enum (level-1|level-2|level-1-2)

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
```

```

    <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</metric>
<config>
  <level-number>level-1-2</level-number> <!-- operation="delete"-->
  <style>1</style> <!-- operation="delete"-->
</config>
</metric>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
metric-style (narrow) level-1-2
```

---

## Configure level number

Use this attribute to configure the ISIS metric style

Attribute Name: style

Attribute Type: enum (narrow|wide|transition|narrow transition|wide transition)

Attribute Name: level-number

Attribute Type: enum (level-1|level-2|level-1-2)

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <metric>
    <config>
      <level-number>level-1-2</level-number> <!-- operation="delete"-->
      <style>2</style> <!-- operation="delete"-->
    </config>
  </metric>
</isis>

```

### Command Syntax

```
metric-style (wide) level-1-2
```

---

## Configure lsp refresh interval

Use this attribute to set the LSP refresh interval. IP Infusion Inc. recommends making the lsp-refresh-interval smaller than max-lsp-lifetime value.

Attribute Name: lsp-refresh-interval

Attribute Type: uint16

Default Value: 900

Attribute Range: 1-65535

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <timers>
    <config>
      <lsp-refresh-interval>1</lsp-refresh-interval> <!-- operation="delete"-->
    </config>
  </timers>
</isis>
```

### Command Syntax

```
lsp-refresh-interval <1-65535>
```

---

## Configure lsp lifetime interval

Use this attribute to set the maximum LSP lifetime. You must set max-lsp-lifetime greater than lsp-refreshinterval.

Attribute Name: lsp-lifetime-interval

Attribute Type: uint16

Default Value: 1200

Attribute Range: 350-65535

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <timers>
    <config>
```

```

        <lsp-lifetime-interval>350</lsp-lifetime-interval> <!-- operation="delete"-->
</config>
</timers>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
max-lsp-lifetime <350-65535>
```

---

## Configure enable

Use this attribute to redistribute reachability information from one level to the other level. If an distribute-list name is given with this command for an access list that does not exist, the routes are still redistributed.

Attribute Name: enable

Attribute Type: empty

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
redistribute isis level-1 into level-2
```

---

## Configure level 1 acl

Use this attribute to redistribute reachability information from one level to the other level. If an distribute-list name is given with this command for an access list that does not exist, the routes are still redistributed.

Attribute Name: level-1-acl

Attribute Type: string

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv6>
<level-1-into-2-redistributes>
<redistribute-level-1-into-2>
  </enable>
  <config>
    </enable><!-- operation="delete"-->
  </config>
    <level-1-acl>WORD</level-1-acl> <!-- operation="delete"-->
</redistribute-level-1-into-2>
</level-1-into-2-redistributes>
</address-family-ipv6>
</isis-instance>
</isis-instances>
</isis>

```

**Command Syntax**

```
redistribute isis level-1 into level-2 distribute-list WORD
```

---

**Configure level 2 acl**

Use this attribute to redistribute reachability information from one level to the other level. If an distribute-list name is given with this command for an access list that does not exist, the routes are still redistributed.

Attribute Name: level-2-acl

Attribute Type: string

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv6>
<level-2-into-1-redistributes>
<redistribute-level-2-into-1>
  </enable>
  <config>
    </enable><!-- operation="delete"-->
  </config>
    <level-2-acl>WORD</level-2-acl> <!-- operation="delete"-->

```

```

</redistribute-level-2-into-1>
</level-2-into-1-redistributes>
</address-family-ipv6>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
redistribute isis level-2 into level-1 distribute-list WORD
```

---

## Configure originate

Use this attribute to set originate reachability information to Default destination into LSP. There is no default information in Level-2 domain by default, while Level-1 router calculates default to L1L2 route during SPF calculation. This command enables to originate default route into Level-2 domain.

Attribute Name: originate

Attribute Type: enum (originate|originate level-1|originate always)

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
default-information (originate|originate level-1|originate always)
```

---

## Configure route map name

Route-map Name

Attribute Name: route-map-name

Attribute Type: string

Default Value: ""

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv6>
<default-route-informations>
<default-route-information>
  <originate>originate</originate>
  <config>
    <originate>originate</originate>
  </config>
  <route-map-name>WORD</route-map-name> <!-- operation="delete"-->
</default-route-information>
</default-route-informations>
</address-family-ipv6>
</isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
default-information (originate|originate level-1|originate always) route-map WORD
```

---

## Configure afi name

Use this attribute to configure IPv6 routing specific configuration

Attribute Name: afi-name

Attribute Type: enum (ipv6)

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv6>
<config>
  <afi-name>1</afi-name>
</config>
</address-family-ipv6>
</isis-instance>
</isis-instances>
```



```
</isis>
```

## Command Syntax

```
address-family ipv6
```

---

## Configure administrative distance

Use this attribute to set the administrative distance for all IPv6 routes

Attribute Name: administrative-distance

Attribute Type: uint32

Default Value: 115

Attribute Range: 1-255

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <address-family-ipv6>
      <config>
        <administrative-distance>1</administrative-distance> <!-- operation="delete"-
->
      </config>
    </address-family-ipv6>
  </isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
distance <1-255>
```

---

## Configure ipv6 metric value

Use this attributes to redistribute routes from another protocol into the ISIS routing table. With metric, metric-type, level and route-map options.

Attribute Name: ipv6-metric-value

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-16777215

Attribute Name: ipv6-metric-type

Attribute Type: enum (internal|external)

Default Value: internal

Attribute Name: ipv6-level

Attribute Type: enum (level-1|level-2|level-1-2)

Default Value: level-2

Attribute Name: ipv6-route-map

Attribute Type: string

Default Value: ""

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <address-family-ipv6>
      <redistributions>
        <redistribute>
          <ipv6-protocol-type>kernel</ipv6-protocol-type>
          <config>
            <ipv6-protocol-type>kernel</ipv6-protocol-type>
            <ipv6-metric-type>internal</ipv6-metric-type>
            <ipv6-level>level-2</ipv6-level>
            <ipv6-route-map>WORD</ipv6-route-map>
          </config>
          <ipv6-metric-value>0</ipv6-metric-value>
        </redistribute>
      </redistributions>
    </address-family-ipv6>
  </isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
redistribute (kernel|connected|static|rip|ospf|bgp) ({ metric-type
  (internal|external)| level-1|level-2|level-1-2| route-map WORD| metric <0-
  16777215> }|)
```

## Configure prefix

Use this attribute to configure the summary prefix to summarize IPv6 reachability information.

Attribute Name: prefix

Attribute Type: string

Attribute Name: level

Attribute Type: enum (level-1|level-2|level-1-2)

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 1-63

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv6>
<summary-prefixes>
<summary-prefix> <!-- operation="delete"-->
  <prefix>X:X::X:X/M</prefix>
  <config>
    <prefix>X:X::X:X/M</prefix>
    <level>level-1</level>
    <metric>1</metric>
  </config>
</summary-prefix>
</summary-prefixes>
</address-family-ipv6>
</isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
summary-prefix X:X::X:X/M (level-1|level-2|level-1-2) (metric <1-63>|)
```

## Configure level

Use this attribute to configure the ISIS Multi-topology

Attribute Name: level

Attribute Type: enum (level-1|level-2|level-1-2|level-1 transition|level-1-2 transition|level-2 transition)

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv6>
<multi-topologies>
<multi-topology>
  <level>level-1-2</level>
</config>
```

```

        <level>level-1-2</level>
    </config>
</multi-topology>
</multi-topologies>
</address-family-ipv6>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
multi-topology (level-1)
```

---

## Configure system id

System ID

Attribute Name: system-id

Attribute Type: string

Attribute Name: value

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
    <instance>WORD</instance>
    <config>
        <instance>WORD</instance>
    </config>
<distances>
<distance>
    <system-id>WORD</system-id>
    <config>
        <system-id>System-ID</system-id>
        <value>1</value> <!-- operation="delete"-->
    </config>
</distance>
</distances>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
distance <1-255> System-ID
```

---

## Configure access list name

Use this attribute to set the administrative distance for specific IPv4 routes.

Attribute Name: access-list-name

Attribute Type: string

Default Value: ""

Attribute Name: value

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <distances>
      <distance>
        <system-id>WORD</system-id>
        <config>
          <system-id>System-ID</system-id>
          <value>1</value> <!-- operation="delete"-->
        </config>
        <access-list-name>WORD</access-list-name> <!-- operation="delete"-->
      </distance>
    </distances>
  </isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
distance <1-255> System-ID (WORD|)
```

---

## Configure set bit on boot

Overload interval after reboot

Attribute Name: set-bit-on-boot

Attribute Type: union

Attribute Name: enabled

Attribute Type: empty

Attribute Name: suppress-type

Attribute Type: enum (default|external|interlevel|external interlevel)

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
```

```

    <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</lsp-over-load>
<config>
  </enabled><!-- operation="delete"-->
  <suppress-type>default</suppress-type> <!-- operation="delete"-->
  <set-bit-on-boot>default</set-bit-on-boot> <!-- operation="delete"-->
</config>
</lsp-over-load>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```

set-overload-bit { suppress (external|interlevel|external interlevel) | on-startup
(wait-for-bgp|<5-86400>) }

```

## Configure enabled

Use this attribute to set the overload-bit in self-LSPs. If the overload-bit is set in LSPs, the router is not used as a transit router during SPF calculation. This configuration causes a router to update its own LSP with the overload bit set and causes the other routers not to use this router as a transit or forwarding router. The router continues to receive LSPs when the overload bit is set. If the on-startup option is specified, the router sets the overload bit only at startup, then clears the bit after the specified interval has elapsed. If the on-startup option is specified using the wait-for-bgp option, the overload bit is setup at startup, then the bit is cleared after the BGP router signals it has finished converging or if the router does not signal it has finished converging in 10 minutes. If there is no BGP process running, the overload bit clears immediately.

Attribute Name: enabled

Attribute Type: empty

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</lsp-over-load>
<config>
  </enabled>
</config>
</lsp-over-load>
</isis-instance>
</isis-instances>
</isis>

```

---

## Command Syntax

set-overload-bit

---

## Configure metric value

IS-IS metric

Attribute Name: metric-value

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-16777215

Attribute Name: metric-type

Attribute Type: enum (internal|external)

Default Value: internal

Attribute Name: route-map

Attribute Type: string

Default Value: ""

Attribute Name: level

Attribute Type: enum (level-1|level-2|level-1-2)

Default Value: level-2

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <address-family-ipv4>
    <redistributions>
      <redistribute>
        <protocol-type>kernel</protocol-type>
        <config>
          <protocol-type>kernel</protocol-type>
          <metric-type>internal</metric-type>
          <route-map>WORD</route-map>
          <level>level-2</level>
        </config>
        <metric-value>0</metric-value>
      </redistribute>
    </redistributions>
  </address-family-ipv4>
</isis>
```

## Command Syntax

```
redistribute (kernel|connected|static|rip|ospf|bgp) ({ metric-type
(internal|external)| route-map WORD| level-1|level-2|level-1-2| metric <0-
16777215> }|)
```

---

## Configure metric

Use this attribute to Summary Address to summarize IPv4 reachability information.

Attribute Name: prefix

Attribute Type: string

Attribute Name: level

Attribute Type: enum (level-1|level-2|level-1-2)

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 1-63

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv4>
<summary-addresses>
<summary-address> <!-- operation="delete"-->
  <prefix>A.B.C.D/M</prefix>
  <config>
    <prefix>A.B.C.D/M</prefix>
    <level>level-1</level>
    <metric>1</metric>
  </config>
</summary-address>
</summary-addresses>
</address-family-ipv4>
</isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
summary-address A.B.C.D/M (level-1|level-2|level-1-2) (metric <1-63>|)
```

---

## Configure id

Instance ID



Attribute Name: id

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <address-family-ipv4>
      <redistribute-isis-instances>
        <redistribute-isis-instance> <!-- operation="delete"-->
          <id>WORD</id>
          <config>
            <id>WORD</id>
          </config>
        </redistribute-isis-instance>
      </redistribute-isis-instances>
    </address-family-ipv4>
  </isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
redistribute isis WORD
```

---

## Configure metric type

IS-IS metric

Attribute Name: metric-value

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-16777215

Attribute Name: metric-type

Attribute Type: enum (internal|external)

Default Value: internal

Attribute Name: route-map

Attribute Type: string

Default Value: ""

Attribute Name: level

Attribute Type: enum (level-1|level-2|level-1-2)

Default Value: level-2

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<address-family-ipv4>
<redistribute-isis-instances>
<redistribute-isis-instance>
  <id>WORD</id>
  <config>
    <id>WORD</id>
    <metric-type>internal</metric-type>
    <route-map>WORD</route-map>
    <level>level-2</level>
  </config>
    <metric-value>0</metric-value>
</redistribute-isis-instance>
</redistribute-isis-instances>
</address-family-ipv4>
</isis-instance>
</isis-instances>
</isis>

```

**Command Syntax**

```

redistribute isis WORD { metric-type (internal|external) | route-map WORD | level-
1|level-2|level-1-2 | metric <0-16777215> }

```

**Configure passive interface all**

Use this attribute to set all interfaces as passive.

Attribute Name: passive-interface-all

Attribute Type: empty

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
<passive-interfaces>
<config>
  </passive-interface-all><!-- operation="delete"-->
</config>
</passive-interfaces>

```

```
</isis-instance>
</isis-instances>
</isis>
```

## Command Syntax

```
passive-interface
```

---

## Configure name

Use this attribute to set interface as passive.

Attribute Name: name

Attribute Type: string

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <passive-interfaces>
    <passive-interface> <!-- operation="delete"-->
      <name>IFNAME</name>
      <config>
        <name>WORD</name>
      </config>
    </passive-interface>
  </passive-interfaces>
</isis>
```

## Command Syntax

```
passive-interface IFNAME
```

---

## Configure hold timer

Time that a router waits to acquire a set of LSPs to process together

Attribute Name: hold-timer

Attribute Type: uint8

Attribute Range: 1-60

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
```

```

    <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</microloop-avoidances>
<microloop-avoidance>
  <level-type>level-1</level-type>
  <config>
    <level-type>level-1</level-type>
  </config>
  <hold-timer>1</hold-timer> <!-- operation="delete"-->
</microloop-avoidance>
</microloop-avoidances>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
microloop-avoidance hold-timer <1-60> (level-1|level-2)
```

---

## Configure max fib

Maximum time required to update a FIB irrespective of the change

Attribute Name: max-fib

Attribute Type: uint8

Attribute Range: 1-60

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <microloop-avoidances>
    <microloop-avoidance>
      <level-type>level-1</level-type>
      <config>
        <level-type>level-1</level-type>
      </config>
      <max-fib>1</max-fib> <!-- operation="delete"-->
    </microloop-avoidance>
  </microloop-avoidances>
</isis>

```

---

## Command Syntax

```
microloop-avoidance max-fib <1-60> (level-1|level-2)
```

---

## Configure level type

Microloop avoidance

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <microloop-avoidances>
    <microloop-avoidance>
      <level-type>level-1</level-type>
      <config>
        <level-type>level-1</level-type>
      </config>
      </enable><!-- operation="delete"-->
    </microloop-avoidance>
  </microloop-avoidances>
</isis>
```

## Command Syntax

```
microloop-avoidance (level-1|level-2)
```

---

## Configure algo number

Use this attribute to configure Flexible Algorithm specific configuration

Attribute Name: algo-number

Attribute Type: uint8

Attribute Range: 128-255

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
</isis>
```

```

    </config>
  <flexalgos>
    <flexalgo> <!-- operation="delete"-->
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
    </flexalgo>
  </flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
flex-algo <128-255>
```

---

## Configure calculation type

ISIS Flexible Algorithm calculation type

Attribute Name: calculation-type

Attribute Type: enum (spf|strict-spf)

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    <flexalgos>
      <flexalgo>
        <algo-number>128</algo-number>
        <config>
          <algo-number>128</algo-number>
        </config>
        <calculation-type>spf</calculation-type> <!-- operation="delete"-->
      </flexalgo>
    </flexalgos>
  </isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
calculation-type (spf|strict-spf)
```

---

## Configure priority

Flexible Algorithm priority Value

Attribute Name: priority

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <priority>1</priority> <!-- operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>
```

### Command Syntax

```
priority <1-255>
```

---

## Configure exclude minimum bandwidth

Minimum bandwidth value constraint for flexible algorithm. The bandwidth input ranges are 1 to 999 Kbps, 1 to 999 Mbps and 1 to 100 Gbps.

Attribute Name: exclude-minimum-bandwidth

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <exclude-minimum-bandwidth>128</exclude-minimum-bandwidth>
      </config>
    </flexalgo>
  </flexalgorithms>
</isis>
```

```

    </config>
    <exclude-minimum-bandwidth>BANDWIDTH</exclude-minimum-bandwidth> <!--
operation="delete"-->
  </flexalgo>
</flexalgorithms>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
exclude-minimum-bandwidth BANDWIDTH
```

---

## Configure exclude maximum delay

Use this attribute to specify maximum link delay value constraint for flexible algorithm

Attribute Name: exclude-maximum-delay

Attribute Type: uint32

Attribute Range: 1-16777215

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <exclude-maximum-delay>1</exclude-maximum-delay> <!-- operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
exclude-maximum-delay <1-16777215>
```

---

## Configure enable intf group mode bw calc

Enable interface group mode total bandwidth calculation for ISIS Flexible algorithm

Attribute Name: enable-intf-group-mode-bw-calc

Attribute Type: empty



**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  </enable-intf-group-mode-bw-calc><!-- operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

**Command Syntax**

```
intf-group-mode bandwidth
```

---

**Configure reference bandwidth**

Reference bandwidth value constraint for flexible algorithm SPF's automatic metric calculation. The bandwidth input ranges are 1 to 999 Kbps, 1 to 999 Mbps and 1 to 100 Gbps.

Attribute Name: reference-bandwidth

Attribute Type: string

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  <reference-bandwidth>BANDWIDTH</reference-bandwidth> <!-- operation="delete"-->
->
</flexalgo>
</flexalgos>

```

```

</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
reference-bandwidth BANDWIDTH
```

---

## Configure granularity bandwidth

Granularity bandwidth value constraint for flexible algorithm SPF's automatic metric calculation. The bandwidth input ranges are 1 to 999 Kbps, 1 to 999 Mbps and 1 to 100 Gbps.

Attribute Name: granularity-bandwidth

Attribute Type: string

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <granularity-bandwidth>BANDWIDTH</granularity-bandwidth> <!--
operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>

```

## Command Syntax

```
granularity-bandwidth BANDWIDTH
```

---

## Configure enable advertise definition

Use this attribute to configure the ISIS Flexible Algorithm Advertisement

Attribute Name: enable-advertise-definition

Attribute Type: empty

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>

```

```

<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  </enable-advertise-definition><!-- operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

advertise

---

## Configure enable participate

Use this attribute to configure the ISIS Flexible Algorithm Participation

Attribute Name: enable-participate

Attribute Type: empty

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </flexalgos>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      </enable-participate><!-- operation="delete"-->
    </flexalgo>
  </flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

participate

---

## Configure enable fast reroute

Use this attribute to configure the ISIS Flexible Algorithm fast rerouting

Attribute Name: enable-fast-reroute

Attribute Type: empty

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgs>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      </enable-fast-reroute><!-- operation="delete"-->
    </flexalgo>
  </flexalgs>
</isis>

```

## Command Syntax

fast-reroute

---

## Configure enable remote lfa

Use this attribute to configure the ISIS Flexible Algorithm Remote-LFA

Attribute Name: enable-remote-lfa

Attribute Type: empty

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgs>

```

```

<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  </enable-remote-lfa><!-- operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
remote-lfa
```

---

## Configure enable ti lfa

Use this attribute to configure the ISIS Flexible Algorithm TI-LFA

Attribute Name: enable-ti-lfa

Attribute Type: empty

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgos>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      </enable-ti-lfa><!-- operation="delete"-->
    </flexalgo>
  </flexalgos>
</isis>

```

### Command Syntax

```
ti-lfa
```

---

## Configure enable prefix metric flag

Use this attribute to configure the ISIS Flexible Algorithm prefix-metric flag sub-TLV advertisement

Attribute Name: enable-prefix-metric-flag

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      </enable-prefix-metric-flag><!-- operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>
```

### Command Syntax

```
prefix-metric-flag
```

---

## Configure fapm metric

Distance Value

Attribute Name: fapm-metric

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
    </flexalgo>
  </flexalgorithms>
</isis>
```

```

        <fapm-metric>1</fapm-metric> <!-- operation="delete"-->
    </flexalgo>
</flexalgorithms>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
fapm-metric <1-255>
```

---

## Configure affinity eag exclude any

Flexible Algorithm Exclude Any Affinity-EAG Name

Attribute Name: affinity-eag-exclude-any

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <affinity-eag-exclude-any>WORD</affinity-eag-exclude-any> <!--
operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>

```

## Command Syntax

```
affinity-eag-exclude-any WORD
```

---

## Configure affinity eag include any

Flexible Algorithm Include Any Affinity-EAG Name

Attribute Name: affinity-eag-include-any

Attribute Type: string

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  <affinity-eag-include-any>WORD</affinity-eag-include-any> <!--
operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

**Command Syntax**

```
affinity-eag-include-any WORD
```

---

**Configure affinity eag include all**

Flexible Algorithm Include All Affinity-EAG Name

Attribute Name: affinity-eag-include-all

Attribute Type: string

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  <affinity-eag-include-all>WORD</affinity-eag-include-all> <!--
operation="delete"-->
</flexalgo>
</flexalgos>

```



```

</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
affinity-eag-include-all WORD
```

---

## Configure affinity eag reverse exclude any

Flexible Algorithm reverse Exclude Any Affinity-EAG Name

Attribute Name: affinity-eag-reverse-exclude-any

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <affinity-eag-reverse-exclude-any>WORD</affinity-eag-reverse-exclude-any> <!--
- operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>

```

## Command Syntax

```
affinity-eag-reverse-exclude-any WORD
```

---

## Configure affinity eag reverse include any

Flexible Algorithm reverse Include Any Affinity-EAG Name

Attribute Name: affinity-eag-reverse-include-any

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>

```

```

    <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  <affinity-eag-reverse-include-any>WORD</affinity-eag-reverse-include-any> <!--
- operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

affinity-eag-reverse-include-any WORD

---

## Configure affinity eag reverse include all

Flexible Algorithm reverse Include All Affinity-EAG Name

Attribute Name: affinity-eag-reverse-include-all

Attribute Type: string

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgos>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <affinity-eag-reverse-include-all>WORD</affinity-eag-reverse-include-all> <!--
- operation="delete"-->
    </flexalgo>
  </flexalgos>
</isis>

```

---

## Command Syntax

affinity-eag-reverse-include-all WORD

---

## Configure affinity ag exclude any

Flexible Algorithm Exclude Any Affinity-AG Name

Attribute Name: affinity-ag-exclude-any

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <affinity-ag-exclude-any>WORD</affinity-ag-exclude-any> <!--
operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>

```

## Command Syntax

affinity-ag-exclude-any WORD

---

## Configure affinity ag include any

Flexible Algorithm Include Any Affinity-AG Name

Attribute Name: affinity-ag-include-any

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
</isis>

```

```

<flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  <affinity-ag-include-any>WORD</affinity-ag-include-any> <!--
operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
affinity-ag-include-any WORD
```

---

## Configure affinity ag include all

Flexible Algorithm Include All Affinity-AG Name

Attribute Name: affinity-ag-include-all

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
<isis-instance>
  <instance>WORD</instance>
  <config>
    <instance>WORD</instance>
  </config>
</flexalgos>
<flexalgo>
  <algo-number>128</algo-number>
  <config>
    <algo-number>128</algo-number>
  </config>
  <affinity-ag-include-all>WORD</affinity-ag-include-all> <!--
operation="delete"-->
</flexalgo>
</flexalgos>
</isis-instance>
</isis-instances>
</isis>

```

### Command Syntax

```
affinity-ag-include-all WORD
```

---

## Configure affinity ag reverse exclude any

Flexible Algorithm reverse Exclude Any Affinity-AG Name

Attribute Name: affinity-ag-reverse-exclude-any

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <affinity-ag-reverse-exclude-any>WORD</affinity-ag-reverse-exclude-any> <!--
operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>
```

### Command Syntax

```
affinity-ag-reverse-exclude-any WORD
```

---

## Configure affinity ag reverse include any

Flexible Algorithm reverse Include Any Affinity-AG Name

Attribute Name: affinity-ag-reverse-include-any

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
```

```

    <config>
      <algo-number>128</algo-number>
    </config>
    <affinity-ag-reverse-include-any>WORD</affinity-ag-reverse-include-any> <!--
operation="delete"-->
  </flexalgo>
</flexalgorithms>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
affinity-ag-reverse-include-any WORD
```

---

## Configure affinity ag reverse include all

Flexible Algorithm reverse Include All Affinity-AG Name

Attribute Name: affinity-ag-reverse-include-all

Attribute Type: string

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgorithms>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <affinity-ag-reverse-include-all>WORD</affinity-ag-reverse-include-all> <!--
operation="delete"-->
    </flexalgo>
  </flexalgorithms>
</isis>

```

## Command Syntax

```
affinity-ag-reverse-include-all WORD
```

---

## Configure threshold metric

Link metric value for the bandwidth threshold

Attribute Name: threshold-metric

Attribute Type: uint32

Attribute Range: 1-4261412

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
  <flexalgos>
    <flexalgo>
      <algo-number>128</algo-number>
      <config>
        <algo-number>128</algo-number>
      </config>
      <flexalgo-bandwidth-thresholds>
        <flexalgo-bandwidth-threshold>
          <bandwidth-threshold>BANDWIDTH</bandwidth-threshold>
          <config>
            <bandwidth-threshold>BANDWIDTH</bandwidth-threshold>
          </config>
          <threshold-metric>1</threshold-metric> <!-- operation="delete"-->
        </flexalgo-bandwidth-threshold>
      </flexalgo-bandwidth-thresholds>
    </flexalgo>
  </flexalgos>
</isis>
```

### Command Syntax

```
flex-algo <128-255> bandwidth-threshold BANDWIDTH threshold-metric <1-4261412>
```

## Configure options

Debug Configuration Flag

Attribute Name: options

Attribute Type: bits (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <debug>
    <config>
      <options>ifsm</options> <!-- operation="delete"-->
    </config>
  </debug>
```

---

```
</isis>
```

### Command Syntax

```
debug isis (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-
updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)
```

---

## Configure enable hello

Use this attribute to turn on debugging for ISIS hello.

Attribute Name: enable-hello

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<debug>
<config>
  </enable-hello><!-- operation="delete"-->
</config>
</debug>
</isis>
```

### Command Syntax

```
debug isis hello
```

---

## clear clns is-neighbors System-ID

Attribute Name: system-id

Attribute Type: string

### Netconf RPC payload

```
<isis-clear-is-neighbors xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<system-id>System-ID</system-id>
</isis-clear-is-neighbors>
```

### Command Syntax

```
clear clns is-neighbors System-ID
```

---

## clear clns neighbors

### Netconf RPC payload

```
<isis-clear-clns-neighbors xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
isis"/>
```

### Command Syntax

```
clear clns neighbors
```



---

## clear ip isis (WORD|) route (redistribution|all)

Attribute Name: instance

Attribute Type: string

Attribute Name: ipv4-route

Attribute Type: enum (redistribution|all)

### Netconf RPC payload

```
<isis-clear-ip-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <instance>WORD</instance>
  <ipv4-route>redistribution</ipv4-route>
</isis-clear-ip-route>
```

### Command Syntax

```
clear ip isis (WORD|) route (redistribution|all)
```

---

## clear ipv6 isis (WORD|) route (redistribution|all)

Attribute Name: instance

Attribute Type: string

Attribute Name: ipv6-route

Attribute Type: enum (redistribution|all)

### Netconf RPC payload

```
<isis-clear-ipv6-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <instance>WORD</instance>
  <ipv6-route>redistribution</ipv6-route>
</isis-clear-ipv6-route>
```

### Command Syntax

```
clear ipv6 isis (WORD|) route (redistribution|all)
```

---

## clear isis (WORD|) process

Attribute Name: instance

Attribute Type: string

### Netconf RPC payload

```
<isis-process-clear xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <instance>WORD</instance>
</isis-process-clear>
```

### Command Syntax

```
clear isis (WORD|) process
```

---

## clear isis counter

### Netconf RPC payload

```
<isis-clear-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis"/>
```

### Command Syntax

```
clear isis counter
```

---

## clear isis adjacency \* (vrf VRFNAME|)

Attribute Name: adjacency-vrf-name

Attribute Type: string

### Netconf RPC payload

```
<isis-clear-adjacency-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">  
<adjacency-vrf-name>VRFNAME</adjacency-vrf-name>  
</isis-clear-adjacency-all>
```

### Command Syntax

```
clear isis adjacency * (vrf VRFNAME|)
```

---

## clear isis WORD adjacency \* (vrf VRFNAME|)

Attribute Name: tag-name

Attribute Type: string

Attribute Name: adjacency-vrf-name

Attribute Type: string

### Netconf RPC payload

```
<isis-process-clear-adjacency-all xmlns="http://www.ipinfusion.com/yang/ocnos/  
ipi-isis">  
<tag-name>WORD</tag-name>  
<adjacency-vrf-name>VRFNAME</adjacency-vrf-name>  
</isis-process-clear-adjacency-all>
```

### Command Syntax

```
clear isis WORD adjacency * (vrf VRFNAME|)
```

---

## clear isis WORD adjacency (IFNAME|) (vrf VRFNAME|)

Attribute Name: tag-name

Attribute Type: string

Attribute Name: tag-if-name

Attribute Type: string

Attribute Name: adjacency-vrf-name

Attribute Type: string

### Netconf RPC payload

```
<isis-process-clear-adjacency-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <tag-name>WORD</tag-name>
  <tag-if-name>IFNAME</tag-if-name>
  <adjacency-vrf-name>VRFNAME</adjacency-vrf-name>
</isis-process-clear-adjacency-interface>
```

### Command Syntax

```
clear isis WORD adjacency (IFNAME|) (vrf VRFNAME|)
```

---

## clear isis adjacency (IFNAME|) (vrf VRFNAME|)

Attribute Name: adjacency-if-name

Attribute Type: string

Attribute Name: adjacency-vrf-name

Attribute Type: string

### Netconf RPC payload

```
<isis-clear-adjacency-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <adjacency-if-name>IFNAME</adjacency-if-name>
  <adjacency-vrf-name>VRFNAME</adjacency-vrf-name>
</isis-clear-adjacency-interface>
```

### Command Syntax

```
clear isis adjacency (IFNAME|) (vrf VRFNAME|)
```

---

## clear isis WORD adjacency system-id XXXX.XXXX.XXXX (vrf VRFNAME|)

Attribute Name: tag-name

Attribute Type: string

Attribute Name: tag-system-id

Attribute Type: string

Attribute Name: tag-vrf-name

Attribute Type: string

### Netconf RPC payload

```
<isis-process-clear-adjacency-system-id xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <tag-name>WORD</tag-name>
  <tag-system-id>XXXX.XXXX.XXXX</tag-system-id>
  <tag-vrf-name>VRFNAME</tag-vrf-name>
</isis-process-clear-adjacency-system-id>
```

---

## Command Syntax

```
clear isis WORD adjacency system-id XXXX.XXXX.XXXX (vrf VRFNAME|)
```

---

## clear isis adjacency system-id XXXX.XXXX.XXXX (vrf VRFNAME|)

Attribute Name: adjacency-system-id

Attribute Type: string

Attribute Name: adjacency-vrf-name

Attribute Type: string

## Netconf RPC payload

```
<isis-clear-adjacency-system-id xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <adjacency-system-id>XXXX.XXXX.XXXX</adjacency-system-id>
  <adjacency-vrf-name>VRFNAME</adjacency-vrf-name>
</isis-clear-adjacency-system-id>
```

## Command Syntax

```
clear isis adjacency system-id XXXX.XXXX.XXXX (vrf VRFNAME|)
```

---

## snmp restart isis

## Netconf RPC payload

```
<isis-restart-snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis"/>
```

## Command Syntax

```
snmp restart isis
```

---

## debug isis (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)

## Netconf RPC payload

```
<isis-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <terminal-debug-options>ifsm</terminal-debug-options>
</isis-terminal-debug-on>
```

## Command Syntax

```
debug isis (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-
updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)
```

---

## no debug isis

(ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)

### Netconf RPC payload

```
<isis-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <terminal-debug-options>ifsm</terminal-debug-options>
</isis-debug-off>
```

### Command Syntax

```
no debug isis (ifsm|nfsm|pdu|lsp|spf|events|nsm|checksum|authentication|local-
updates|protocol-errors|bfd|rib|lfa|ofib|asla|flexalgo|all)
```

---

## debug isis spf-trace

### Netconf RPC payload

```
<isis-terminal-debug-spf-trace-on xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-isis"/>
```

### Command Syntax

```
debug isis spf-trace
```

---

## no debug isis spf-trace

### Netconf RPC payload

```
<isis-terminal-debug-spf-trace-off xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-isis"/>
```

### Command Syntax

```
no debug isis spf-trace
```

---

## debug isis hello

### Netconf RPC payload

```
<isis-debug-hello-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis"/>
```

### Command Syntax

```
debug isis hello
```

---

## no debug isis hello

### Netconf RPC payload

```
<isis-debug-hello-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis"/>
```

### Command Syntax

```
no debug isis hello
```

---

## debug isis hello interface IFNAME

Attribute Name: interface

Attribute Type: string

### Netconf RPC payload

```
<isis-debug-interface-hello-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">  
  <interface>IFNAME</interface>  
</isis-debug-interface-hello-on>
```

### Command Syntax

```
debug isis hello interface IFNAME
```

---

## no debug isis hello interface IFNAME

Attribute Name: interface

Attribute Type: string

### Netconf RPC payload

```
<isis-debug-interface-hello-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">  
  <interface>IFNAME</interface>  
</isis-debug-interface-hello-off>
```

### Command Syntax

```
no debug isis hello interface IFNAME
```

---

## debug isis hello System-ID

Attribute Name: system-id

Attribute Type: string

### Netconf RPC payload

```
<isis-debug-system-id-hello-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">  
  <system-id>System-ID</system-id>  
</isis-debug-system-id-hello-on>
```

---

## Command Syntax

```
debug isis hello System-ID
```

---

## no debug isis hello System-ID

Attribute Name: system-id

Attribute Type: string

### Netconf RPC payload

```
<isis-debug-system-id-hello-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <system-id>System-ID</system-id>
</isis-debug-system-id-hello-off>
```

## Command Syntax

```
no debug isis hello System-ID
```

---

## no debug all isis

### Netconf RPC payload

```
<isis-all-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis"/>
```

## Command Syntax

```
no debug all isis
```

---

# IPI-ISIS-LSP

---

## Configure spf max delay

Maximum delay between receiving a change to SPF calculation in milliseconds. The default value is 5000

Attribute Name: spf-max-delay

Attribute Type: uint32

Attribute Range: 0-2147483647

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <spf-levels>
        <spf-level>
          <level>level-1-2</level>
        </spf-level>
      </spf-levels>
    </isis-instance>
  </isis-instances>
</isis>
```

```

    <config>
      <level>level-1-2</level>
    </config>
  <spf-delays>
    <spf-delay> <!-- operation="delete"-->
      <spf-max-delay>0</spf-max-delay>
      <config>
        <spf-max-delay>0</spf-max-delay>
        <spf-min-delay>0</spf-min-delay>
      </config>
      <spf-min-delay>0</spf-min-delay>
    </spf-delay>
  </spf-delays>
</spf-level>
</spf-levels>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
spf-interval-exp ((level-1|level-2) |) <0-2147483647> <0-2147483647>
```

## Configure lsp max wait interval

Use this attribute to set minimum interval before regenerating the same LSP. The smaller the interval, the faster the convergence. However, this setting might cause more frequent flooding

Attribute Name: lsp-max-wait-interval

Attribute Type: uint32

Default Value: 5

Attribute Range: 1-120

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <levels>
        <level>
          <type>level-1-2</type>
          <config>
            <type>level-1-2</type>
          </config>
          <lsp-max-wait-interval>1</lsp-max-wait-interval> <!--
operation="delete"-->
        </level>
      </levels>
    </isis-instance>
  </isis-instances>
</isis>

```



```

</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
lsp-gen-interval ((level-1|level-2) |) <1-120>
```

---

## Configure lsp mtu size

Use this attribute to set minimum interval before regenerating the same LSP

Attribute Name: lsp-mtu-size

Attribute Type: uint16

Default Value: 1492

Attribute Range: 512-4352

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
  <isis-instance>
    <instance>WORD</instance>
    <config>
      <instance>WORD</instance>
    </config>
    <levels>
      <level>
        <type>level-1-2</type>
        <config>
          <type>level-1-2</type>
        </config>
        <lsp-mtu-size>512</lsp-mtu-size> <!-- operation="delete"-->
      </level>
    </levels>
  </isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
lsp-mtu ((level-1|level-2) |) <512-4352>
```

---

## Configure wait timer

Number of seconds to delay in waiting state before on state

Attribute Name: wait-timer

Attribute Type: uint16

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
  <isis-instance>
    <instance>WORD</instance>
    <config>
      <instance>WORD</instance>
    </config>
    <levels>
    <level>
      <type>level-1-2</type>
      <config>
        <type>level-1-2</type>
      </config>
      <wait-timer>1</wait-timer> <!-- operation="delete"-->
    </level>
    </levels>
  </isis-instance>
</isis-instances>
</isis>

```

**Command Syntax**

```
isis wait-timer <1-65535> level-1-2
```

---

**Configure restart timer**

Use this attribute to restart the ISIS timer

Attribute Name: restart-timer

Attribute Type: uint16

Attribute Range: 5-65535

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
  <isis-instance>
    <instance>WORD</instance>
    <config>
      <instance>WORD</instance>
    </config>
    <levels>
    <level>
      <type>level-1-2</type>
      <config>
        <type>level-1-2</type>
      </config>
      <restart-timer>5</restart-timer> <!-- operation="delete"-->
    </level>
    </levels>
  </isis-instance>
</isis-instances>
</isis>

```

```

</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
restart-timer <5-65535> level-1-2
```

---

## Configure instance

Number of seconds to delay in waiting state before on state

Attribute Name: wait-timer

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <levels>
        <level>
          <type>level-1-2</type>
          <config>
            <type>level-1-2</type>
          </config>
          <wait-timer>1</wait-timer> <!-- operation="delete"-->
        </level>
      </levels>
    </isis-instance>
  </isis-instances>
</isis>

```

## Command Syntax

```
isis wait-timer <1-65535> (level-1|level-2|)
```

---

## Configure type

Use this attribute to restart the ISIS timer

Attribute Name: restart-timer

Attribute Type: uint16

Attribute Range: 5-65535

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
```

```

<isis-instances>
  <isis-instance>
    <instance>WORD</instance>
    <config>
      <instance>WORD</instance>
    </config>
    <levels>
      <level>
        <type>level-1-2</type>
        <config>
          <type>level-1-2</type>
        </config>
        <restart-timer>5</restart-timer> <!-- operation="delete"-->
      </level>
    </levels>
  </isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
restart-timer <5-65535> (level-1|level-2|)
```

---

## Configure mode

Use this attribute to set the authentication mode at the instance level.

Attribute Name: mode

Attribute Type: enum (md5|text)

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <levels>
        <level>
          <type>level-1-2</type>
          <config>
            <type>level-1-2</type>
          </config>
          <authentication>
            <config>
              <mode>md5</mode>
            </config>
          </authentication>
        </level>
      </levels>
    </isis-instance>
  </isis-instances>
</isis>

```

```

</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
authentication mode (md5|text) (level-1|level-2|)
```

---

## Configure key chain

Use this attribute to set the key chain to be used for authentication at the instance level. Authentication mode must be set to md5/text to configure the key chain.

Attribute Name: key-chain

Attribute Type: string

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
  <isis-instance>
    <instance>WORD</instance>
    <config>
      <instance>WORD</instance>
    </config>
    <levels>
    <level>
      <type>level-1-2</type>
      <config>
        <type>level-1-2</type>
      </config>
      <authentication>
      <config>
        <key-chain>WORD</key-chain> <!-- operation="delete"-->
      </config>
    </authentication>
    </level>
  </levels>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
authentication key-chain WORD (level-1|level-2|)
```

---

## IPI-ISIS-EXTENDED

---

## Configure name

Specific prefixex allowed using this route map

Attribute Name: name

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
      <fast-reroute-levels>
      <fast-reroute>
        <level-type>level-1</level-type>
        <config>
          <level-type>level-1</level-type>
        </config>
        <route-maps>
        <route-map>
          <protocol>ipv4</protocol>
          <config>
            <protocol>ipv4</protocol>
          </config>
          <name>WORD</name> <!-- operation="delete"-->
        </route-map>
      </route-maps>
    </fast-reroute>
  </fast-reroute-levels>
</isis-instance>
</isis-instances>
</isis>
```

### Command Syntax

```
fast-reroute per-prefix (level-1|level-2) proto (ipv4) route-map WORD
```

---

## Configure enable all prefixes

Apply on all prefixes

Attribute Name: enable-all-prefixes

Attribute Type: enum (all)

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <isis-instances>
    <isis-instance>
      <instance>WORD</instance>
      <config>
        <instance>WORD</instance>
      </config>
    </isis-instance>
  </isis-instances>
</isis>
```

```

    <fast-reroute-levels>
    <fast-reroute>
      <level-type>level-1</level-type>
      <config>
        <level-type>level-1</level-type>
      </config>
      <route-maps>
      <route-map>
        <protocol>ipv4</protocol>
        <config>
          <protocol>ipv4</protocol>
        </config>
        <enable-all-prefixes>all</enable-all-prefixes> <!--
operation="delete"-->
      </route-map>
    </route-maps>
  </fast-reroute>
</fast-reroute-levels>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```
fast-reroute per-prefix (level-1|level-2) proto (ipv4) (all)
```

---

## Configure preference index

this index indicates which tie-break option to be given preference

This command is supported when following feature are enabled ISIS feature

Attribute Name: preference-index

Attribute Type: uint32

Attribute Range: 1-255

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<isis-instances>
  <isis-instance>
    <instance>WORD</instance>
    <config>
      <instance>WORD</instance>
    </config>
    <fast-reroute-levels>
    <fast-reroute>
      <level-type>level-1</level-type>
      <config>
        <level-type>level-1</level-type>
      </config>
      <protocols>
      <protocol>

```

```

        <preference-value>primary-path</preference-value>
    </config>
    <preference-value>primary-path</preference-value>
    <lfa-protocol>ipv4</lfa-protocol>
</config>
    <lfa-protocol>ipv4</lfa-protocol>
    <preference-index>1</preference-index> <!-- operation="delete"-->
</protocol>
</protocols>
</fast-reroute>
</fast-reroute-levels>
</isis-instance>
</isis-instances>
</isis>

```

## Command Syntax

```

fast-reroute tie-break (level-1|level-2) proto (ipv4) (primary-path|node-
protecting|interface-disjoint|broadcast-interface-disjoint|downstream-
path|secondary-path) index <1-255>

```

---

## Configure grace period

The period within which ISIS should come up

Attribute Name: grace-period

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <graceful-restart>
    <config>
      <grace-period>1</grace-period> <!-- operation="delete"-->
    </config>
  </graceful-restart>
</isis>

```

## Command Syntax

```

isis restart grace-period <1-65535>

```

---

## Configure enable helper only

Attribute to configure helper mode

Attribute Name: enable-helper-only

Attribute Type: empty

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <graceful-restart>

```



```

<config>
    </enable-helper-only><!-- operation="delete"-->
</config>
</graceful-restart>
</isis>

```

### Command Syntax

```
isis restart helper
```

---

## Configure suppress adjacency

When set to true, adjacency is not advertised. The SA bit is used by a starting router to request that its neighbor suppress advertisement of the adjacency to the starting router in the neighbor's LSPs.

Attribute Name: suppress-adjacency

Attribute Type: empty

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <graceful-restart>
    <config>
      </suppress-adjacency><!-- operation="delete"-->
    </config>
  </graceful-restart>
</isis>

```

### Command Syntax

```
isis restart suppress-adjacency
```

---

## restart isis graceful (grace-period <1-65535>|)

Attribute Name: grace-period

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf RPC payload

```

<ipi-isis-extended_isis-restart-graceful xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <grace-period>1</grace-period>
</ipi-isis-extended_isis-restart-graceful>

```

### Command Syntax

```
restart isis graceful (grace-period <1-65535>|)
```

---

## IPI-ISIS-INTERFACE

---

### Configure minimal

Use this attribute to set the minimal Hello interval in seconds.

Attribute Name: minimal

Attribute Type: enum (level-1-only|level-2-only|level-1-2)

Default Value: level-1-2

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <minimal>3</minimal> <!-- operation="delete"-->
    </interface>
  </interfaces>
</isis>
```

### Command Syntax

```
isis hello-interval minimal level-1
```

---

### Configure name

Use this attribute to set the minimal Hello interval in seconds.

Attribute Name: minimal

Attribute Type: enum (level-1-only|level-2-only|level-1-2)

Default Value: level-1-2

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <minimal>3</minimal> <!-- operation="delete"-->
    </interface>
  </interfaces>
</isis>
```

## Command Syntax

```
isis hello-interval minimal level-2
```

---

## Configure send only

Use this attribute to set the send-only option to the interface-related packets. Use this attribute before configuring the ISIS authentication mode and ISIS authentication key-chain, so that the implementation of authentication goes smoothly. That is, the routers will have more time for the keys to be configured on each router if authentication is inserted only on the packets being sent, not checked on packets being received. After all routers that must communicate are configured with this attribute, enable the authentication mode and key chain on each router.

Attribute Name: send-only

Attribute Type: enum (level-1-only|level-2-only|level-1-2)

Default Value: level-1-2

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <send-only>3</send-only> <!-- operation="delete"-->
    </interface>
  </interfaces>
</isis>
```

## Command Syntax

```
isis authentication send-only level-1
```

---

## Configure maximum bandwidth flex algo

Interface ASLA maximum bandwidth value for IGP Flexible Algorithm. The bandwidth input ranges are 1 to 999 Kbps, 1 to 999 Mbps and 1 to 100 Gbps.

Attribute Name: maximum-bandwidth-flex-algo

Attribute Type: string

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <maximum-bandwidth-flex-algo>BANDWIDTH</maximum-bandwidth-flex-algo> <!--
operation="delete"-->
    </interface>
```

```
</interfaces>
</isis>
```

## Command Syntax

```
maximum-bandwidth flex-algo BANDWIDTH
```

---

## Configure disable asla usage flex algo

Use this attribute to disable ASLA Link attributes usage for flexible-algorithm on this Link. The command with no keyword enables the ASLA usage

Attribute Name: disable-asla-usage-flex-algo

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </disable-asla-usage-flex-algo><!-- operation="delete"-->
</interface>
</interfaces>
</isis>
```

## Command Syntax

```
disable asla flex-algo
```

---

## Configure disable padding

Use this attribute to configure/unconfigure the padding of the ISIS Hello packet. ISIS pads the Hello packet by default to notify neighbors of the supported MTU size.

Attribute Name: disable-padding

Attribute Type: uint8

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <config>
    </disable-padding><!-- operation="delete"-->
  </config>
</interface>
</interfaces>
</isis>
```

```

</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
no isis hello padding
```

---

## Configure network type

Use this attribute to change a broadcast interface network type to a point-to-point network type and vice-versa.

Attribute Name: network-type

Attribute Type: enum (broadcast|point-to-point)

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
    </config>
    <interface-parameters>
      <config>
        <network-type>broadcast</network-type> <!-- operation="delete"-->
      </config>
    </interface-parameters>
  </interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis network (broadcast|point-to-point)
```

---

## Configure circuit type

Use this attribute to set the circuit type for the interface. If level-1 or level-2-only is specified in this attribute, ISIS sends only the specified level of PDUs. On the point-to-point interface, there is only one type of Hello packet, so in this case ISIS Hello will be sent regardless of circuit-type. If istype is configured as level-1 or level-2 only, routing for this instance is performed for only the specified level. In this manner, only the particular level of PDU is sent on the interface.

Attribute Name: circuit-type

Attribute Type: enum (level-1|level-2-only|level-1-2)

Default Value: level-1-2

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>

```

```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</interface-parameters>
<config>
  <circuit-type>level-1-2</circuit-type> <!-- operation="delete"-->
</config>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

### Command Syntax

```
isis circuit-type (level-1|level-2-only|level-1-2)
```

---

## Configure ipv4 instance tag

Use this attribute to enable ISIS IPv4 routing on the interface. This attribute is mandatory to ISIS configuration. Match the ISIS instance tag to one of existing instance.s tags, or a new instance with the tag name should be initiated, otherwise routing will not run on this interface. Configuring this attribute, the router sends ISIS Hello with IP address TLV on this interface, and IP reachability information TLV in the LSP will be updated.

Attribute Name: ipv4-instance-tag

Attribute Type: string

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <config>
          <ipv4-instance-tag>WORD</ipv4-instance-tag> <!-- operation="delete"-->
        </config>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>

```

### Command Syntax

```
ip router isis WORD
```

---

## Configure ipv6 instance tag

Use this attribute to enable ISIS IPv6 routing on the interface. This attribute is mandatory to IPv6 ISIS configuration. Match the ISIS instance tag to one of existing instance.s tags, or a new instance with the tag name should be initiated,

otherwise routing will not run on this interface. Configuring this attribute, the router sends ISIS Hello with IPv6 address TLV on this interface, and IPv6 reachability information TLV in the LSP will be updated.

Attribute Name: ipv6-instance-tag

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <config>
          <ipv6-instance-tag>WORD</ipv6-instance-tag> <!-- operation="delete"-->
        </config>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>
```

### Command Syntax

```
ipv6 router isis WORD
```

---

## Configure lsp interval

Use this attribute to set the Link State Packet (LSP) transmission interval. Configuring this attribute changes the minimum interval between two consecutive LSP transmission. When flooding or some other event triggers LSP to transmit, the LSP is put on the interface queue and scheduled to transmit according to this interval. Two consecutive LSP transmissions are scheduled to have at least this interval.

Attribute Name: lsp-interval

Attribute Type: uint32

Default Value: 33

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <config>
          <lsp-interval>1</lsp-interval> <!-- operation="delete"-->
        </config>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>
```

```

</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis lsp-interval <1-4294967295>
```

---

## Configure retransmit interval

Interval between retransmissions of the same LSP in seconds

Attribute Name: retransmit-interval

Attribute Type: uint16

Default Value: 5

Attribute Range: 1-65535

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
        </config>
        <interface-parameters>
          <config>
            <retransmit-interval>1</retransmit-interval> <!-- operation="delete"-->
          </config>
        </interface-parameters>
      </interface>
    </interfaces>
  </isis>

```

## Command Syntax

```
isis retransmit-interval <1-65535>
```

---

## Configure mesh group id

Use this attribute to specify to block LSPs on the current interface. If an interface is configured as mesh group blocked, the standard LSP database synchronization process is applied if the interface receives CSNP or PSNP.

Attribute Name: mesh-group-id

Attribute Type: union

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>

```



```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</interface-parameters>
<config>
  <mesh-group-id>blocked</mesh-group-id> <!-- operation="delete"-->
</config>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

### Command Syntax

```
isis mesh-group (blocked|<1-4294967295>)
```

---

## Configure enable

Use this attribute to enable the BFD check on interface.

This command is supported when following feature are enabled

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <bfd>
          <config>
            </enable><!-- operation="delete"-->
          </config>
        </bfd>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>

```

### Command Syntax

```
isis bfd
```

---

## Configure disable

Use this attribute to disable the BFD check on interface.

This command is supported when following feature are enabled

Attribute Name: disable

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <bfd>
          <config>
            </disable><!-- operation="delete"-->
          </config>
        </bfd>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>
```

### Command Syntax

```
isis bfd disable
```

---

## Configure disable level 1

Use this attribute to disable fr on an interface for level-1.

Attribute Name: disable-level-1

Attribute Type: empty

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <fast-re-route>
          <config>
            </disable-level-1><!-- operation="delete"-->
          </config>
        </fast-re-route>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>
```

```
</interfaces>
</isis>
```

## Command Syntax

```
isis fast-reroute per-prefix candidate disable level-1
```

---

## Configure disable level 2

Use this attribute to disable fr on an interface for level-2.

Attribute Name: disable-level-2

Attribute Type: empty

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
    </config>
    <interface-parameters>
      <fast-re-route>
        <config>
          </disable-level-2><!-- operation="delete"-->
        </config>
      </fast-re-route>
    </interface-parameters>
  </interface>
</interfaces>
</isis>
```

## Command Syntax

```
isis fast-reroute per-prefix candidate disable level-2
```

---

## Configure hello interval

Use this attribute to set the Hello interval in seconds. The Hello-interval is set with the hello-multiplier. Configuring this attribute changes the time interval between two consecutive Hello transmissions. If a device receives its own LSP with a maximum sequence number, then it suspends ISIS for the hold interval. DIS sends Hello transmissions at three times the rate than non-DIS. If ISIS is elected as DIS on this interface, ISIS sends Hello every 3.3 seconds. If minimal keyword is specified, Holding timer in Hello PDU is set to 1 second and Hello interval is calculated by dividing by the hello-multiplier.

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>
    <config>
      <level>level-1-2</level>
    </config>
    <hello-interval>1</hello-interval> <!-- operation="delete"-->
  </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

**Command Syntax**

```
isis hello-interval <1-65535> (level-1|level-2|)
```

---

**Configure hello multiplier**

Use this attribute to set multiplier for Hello holding time. Changes Holding Timer in Hello PDU. Holding timer is calculated by .Hello-Interval. multiplied by this value. If minimal keyword is specified with the Hello-Interval, the holding timer is set to 1 second and the hello-interval is calculated by dividing 1 by this value.

Attribute Name: hello-multiplier

Attribute Type: uint8

Default Value: 3

Attribute Range: 2-100

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>

```

```

    <config>
      <level>level-1-2</level>
    </config>
    <hello-multiplier>2</hello-multiplier> <!-- operation="delete"-->
  </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis hello-multiplier <2-100> (level-1|level-2|)
```

## Configure csnp interval

Use this attribute to set CSNP (Complete sequence number PDU) interval in seconds. Configuring this attribute changes the interval between two consecutive CSNP transmission. By default, CSNP is sent every 10 seconds only by LAN DIS. This parameter is only valid on broadcast interface, since periodic CSNP is only sent on broadcast interface, while CSNP on Point-to-Point interface is sent only when adjacency is initiated.

Attribute Name: csnp-interval

Attribute Type: uint16

Default Value: 10

Attribute Range: 1-65535

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <level-infos>
          <level-info>
            <level>level-1-2</level>
            <config>
              <level>level-1-2</level>
            </config>
            <csnp-interval>1</csnp-interval> <!-- operation="delete"-->
          </level-info>
        </level-infos>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>

```

## Command Syntax

```
isis csnp-interval <1-65535> (level-1|level-2|)
```

---

## Configure priority

Use this attribute to set the priority for LAN DIS election. This attribute changes the priority value in LAN ISIS Hello PDUs. A lower priority value is less preferred in DIS election, and a higher priority value is more preferred

Attribute Name: priority

Attribute Type: uint8

Default Value: 64

Attribute Range: 0-127

## Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
    <level-infos>
      <level-info>
        <level>level-1-2</level>
        <config>
          <level>level-1-2</level>
        </config>
        <priority>0</priority> <!-- operation="delete"-->
      </level-info>
    </level-infos>
  </interface-parameters>
</interface>
</interfaces>
</isis>
```

## Command Syntax

```
isis priority <0-127> (level-1|level-2|)
```

---

## Configure metric

Use this attribute to set default metric for the interface. The interface default metric is put into IP reachability information TLVs, IS reachability information TLVs and IPv6 reachability TLVs in LSPs. The value is used for SPF calculation, and is applied when the metric-style is configured as .narrow.

Attribute Name: metric

Attribute Type: uint8

Default Value: 10

Attribute Range: 1-63

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>
    <config>
      <level>level-1-2</level>
    </config>
    <metric>1</metric> <!-- operation="delete"-->
  </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>
```

### Command Syntax

```
isis metric <1-63> (level-1|level-2|)
```

---

## Configure password

Use this attribute to set the authentication password of Hello PDU on the interface.

Attribute Name: password

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>
    <config>
      <level>level-1-2</level>
    </config>
  </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>
```

```

        <password>WORD</password> <!-- operation="delete"-->
    </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis password WORD (level-1|level-2|)
```

---

## Configure tag

Use this attribute to sets the tag for link-state packets (LSPs) sent out advertising routes for networks directly connected to an interface. If you do not specify a parameter, then the tag value is set for level-1-2 boundary

Attribute Name: tag

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <interface-parameters>
    <level-infos>
    <level-info>
        <level>level-1-2</level>
        <config>
            <level>level-1-2</level>
        </config>
        <tag>1</tag> <!-- operation="delete"-->
    </level-info>
    </level-infos>
    </interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis tag <1-4294967295> (level-1|level-2|)
```



---

## Configure wide metric

Use this attribute to set wide metric for the interface. Interface wide-metric is put into Extended IP reachability TLVs, Extended IS reachability TLVs and IPv6 reachability TLVs in LSPs. The value is used for SPF calculation. This value is applied when metric-style is configured as 'wide'.

Attribute Name: wide-metric

Attribute Type: uint32

Default Value: 10

Attribute Range: 1-16777214

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <level-infos>
          <level-info>
            <level>level-1-2</level>
            <config>
              <level>level-1-2</level>
            </config>
            <wide-metric>1</wide-metric> <!-- operation="delete"-->
          </level-info>
        </level-infos>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>
```

### Command Syntax

```
isis wide-metric <1-16777214> (level-1|level-2|)
```

---

## Configure restart hello interval

Use this attribute to configure the T1 timer, interval of ISIS Hello packet with restart TLV.

Attribute Name: restart-hello-interval

Attribute Type: uint16

Default Value: 3

Attribute Range: 1-65535

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
```

```

<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
    <level-infos>
      <level-info>
        <level>level-1-2</level>
        <config>
          <level>level-1-2</level>
        </config>
        <restart-hello-interval>1</restart-hello-interval> <!--
operation="delete"-->
      </level-info>
    </level-infos>
  </interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis restart-hello-interval <1-65535> (level-1|level-2|)
```

---

## Configure te minimum delay

Interface minimum delay value in microseconds.

Attribute Name: te-minimum-delay

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <level-infos>
          <level-info>
            <level>level-1-2</level>
            <config>
              <level>level-1-2</level>
            </config>
            <te-minimum-delay>1</te-minimum-delay> <!-- operation="delete"-->
          </level-info>
        </level-infos>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>

```

```

</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis te-minimum-delay <1-65535> (level-1|level-2|)
```

---

## Configure te maximum delay

Interface maximum delay value in microseconds.

Attribute Name: te-maximum-delay

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>
    <config>
      <level>level-1-2</level>
    </config>
    <te-maximum-delay>1</te-maximum-delay> <!-- operation="delete"-->
  </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis te-maximum-delay <1-65535> (level-1|level-2|)
```

---

## Configure te minimum delay flex algo

Interface minimum delay value for IGP Flexible Algorithm in microseconds.

Attribute Name: te-minimum-delay-flex-algo

Attribute Type: uint32

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>
    <config>
      <level>level-1-2</level>
    </config>
    <te-minimum-delay-flex-algo>1</te-minimum-delay-flex-algo> <!--
operation="delete"-->
  </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

**Command Syntax**

```
isis te-minimum-delay flex-algo <1-65535> (level-1|level-2|)
```

---

**Configure te maximum delay flex algo**

Interface maximum delay value for IGP Flexible Algorithm in microseconds.

Attribute Name: te-maximum-delay-flex-algo

Attribute Type: uint32

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <interface-parameters>
  <level-infos>
  <level-info>
    <level>level-1-2</level>
    <config>
      <level>level-1-2</level>
    </config>

```

```

        <te-maximum-delay-flex-algo>1</te-maximum-delay-flex-algo> <!--
operation="delete"-->
    </level-info>
</level-infos>
</interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis te-maximum-delay flex-algo <1-65535> (level-1|level-2|)
```

---

## Configure mode

Use this attribute to set the MD5 authentication mode.

Attribute Name: mode

Attribute Type: enum (md5|text)

## Netconf edit-config payload

```

<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <interface-parameters>
    <level-infos>
    <level-info>
        <level>level-1-2</level>
        <config>
            <level>level-1-2</level>
        </config>
        <authentication>
        <config>
            <mode>md5</mode>
        </config>
        </authentication>
    </level-info>
    </level-infos>
    </interface-parameters>
</interface>
</interfaces>
</isis>

```

## Command Syntax

```
isis authentication mode (md5|text) (level-1|level-2|)
```

---

## Configure key chain

Use this attribute to set the key chain to be used for authentication on the interface-related packets. Authentication mode must be set to md5/text to configure the key chain. Only one authentication key-chain is applied to an ISIS interface at a time. Authentication can be specified for an entire instance of ISIS, instead of at the interface level, by setting the authentication key-chain attribute at global level.

Attribute Name: key-chain

Attribute Type: string

### Netconf edit-config payload

```
<isis xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-isis">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-parameters>
        <level-infos>
          <level-info>
            <level>level-1-2</level>
            <config>
              <level>level-1-2</level>
            </config>
            <authentication>
              <config>
                <key-chain>WORD</key-chain> <!-- operation="delete"-->
              </config>
            </authentication>
          </level-info>
        </level-infos>
      </interface-parameters>
    </interface>
  </interfaces>
</isis>
```

### Command Syntax

```
isis authentication key-chain WORD (level-1|level-2|)
```

---

## clear isis interface counter (IFNAME|)

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```
<ipi-isis-interface_isis-clear-interface-counters xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-isis">
  <name>IFNAME</name>
</ipi-isis-interface_isis-clear-interface-counters>
```

---

## Command Syntax

```
clear isis interface counter (IFNAME|)
```

---

# IPI-KEYCHAIN

---

## Configure name

key-chain name

Attribute Name: name

Attribute Type: string

### Netconf edit-config payload

```
<key-chains xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-keychain">
  <key-chain> <!-- operation="delete"-->
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  </key-chain>
</key-chains>
```

## Command Syntax

```
key chain WORD
```

---

## Configure key id

Use this attribute to manageCOMMA add or delete authentication keys in a key-chain

Attribute Name: key-id

Attribute Type: uint32

Attribute Range: 0-2147483647

### Netconf edit-config payload

```
<key-chains xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-keychain">
  <key-chain>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  <keys>
    <key-list> <!-- operation="delete"-->
      <key-id>0</key-id>
    <config>
      <key-id>0</key-id>
    </config>
  </key-list>
```

```
</keys>  
</key-chain>  
</key-chains>
```

## Command Syntax

```
key-id <0-2147483647>
```

---

## Configure key string

Use this attribute to define a password to be used by a key

Attribute Name: key-string

Attribute Type: string

Attribute Range: 1-80

## Netconf edit-config payload

```
<key-chains xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-keychain">  
  <key-chain>  
    <name>WORD</name>  
    <config>  
      <name>WORD</name>  
    </config>  
  </key-chain>  
</key-chains>  
<keys>  
  <key-list>  
    <key-id>0</key-id>  
    <config>  
      <key-id>0</key-id>  
      <key-string>WORD</key-string> <!-- operation="delete"-->  
    </config>  
  </key-list>  
</keys>  
</key-chain>  
</key-chains>
```

## Command Syntax

```
key-string WORD
```

---

## Configure encrypted

Use this attribute to pass the key string in hexadecimal string format

Attribute Name: encrypted

Attribute Type: string

Attribute Range: 18-162

## Netconf edit-config payload

```
<key-chains xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-keychain">  
  <key-chain>  
    <name>WORD</name>
```



```

    <config>
      <name>WORD</name>
    </config>
  <keys>
    <key-list>
      <key-id>0</key-id>
      <config>
        <key-id>0</key-id>
      </config>
      <encrypted>WORD</encrypted> <!-- operation="delete"-->
    </key-list>
  </keys>
</key-chain>
</key-chains>

```

## Command Syntax

```
key-string encrypted WORD
```

---

## Configure start date time for accept

Configure the start date-time of the key for accept-lifetime

Attribute Name: start-date-time-for-accept

Attribute Type: string

Attribute Name: end-date-time-for-accept

Attribute Type: string

Attribute Name: infinite-for-accept

Attribute Type: empty

Attribute Name: duration-for-accept

Attribute Type: uint32

Attribute Range: 1-2147483646

## Netconf edit-config payload

```

<key-chains xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-keychain">
  <key-chain>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  <keys>
    <key-list>
      <key-id>0</key-id>
      <config>
        <key-id>0</key-id>
      </config>
      <accept-lifetime>
      <config>

```

```

        <end-date-time-for-accept>KEYCHAIN_DATE_TIME_T</end-date-time-for-accept>
    </infinite-for-accept>
    <duration-for-accept>1</duration-for-accept>
    <start-date-time-for-accept>KEYCHAIN_DATE_TIME_T</start-date-time-for-accept>
accept>
    </config>
</accept-lifetime>
</key-list>
</keys>
</key-chain>
</key-chains>

```

## Command Syntax

```

accept-lifetime HH:MM:SS MONTH <01-31> <1993-2035> HH:MM:SS MONTH <01-31> <1993-2035>
infinite duration <1-2147483646>

```

---

## Configure start date time for send

Configure the start date-time of the key for send-lifetime

Attribute Name: start-date-time-for-send

Attribute Type: string

Attribute Name: end-date-time-for-send

Attribute Type: string

Attribute Name: infinite-for-send

Attribute Type: empty

Attribute Name: duration-for-send

Attribute Type: uint32

Attribute Range: 1-2147483646

## Netconf edit-config payload

```

<key-chains xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-keychain">
  <key-chain>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  </key-chain>
</key-chains>
<key-list>
  <key-id>0</key-id>
  <config>
    <key-id>0</key-id>
  </config>
<send-lifetime>
  <config>
    <end-date-time-for-send>KEYCHAIN_DATE_TIME_T</end-date-time-for-send>
    </infinite-for-send>
    <duration-for-send>1</duration-for-send>
  </config>
</send-lifetime>

```

```

        <start-date-time-for-send>KEYCHAIN_DATE_TIME_T</start-date-time-for-send>
    </config>
</send-lifetime>
</key-list>
</keys>
</key-chain>
</key-chains>

```

## Command Syntax

```

send-lifetime HH:MM:SS MONTH <01-31> <1993-2035> HH:MM:SS MONTH <01-31> <1993-2035>
infinite duration <1-2147483646>

```

---

## IPI-PIM

---

### Configure bfd

Use this attribute to debug the PIM BFD feature.

This command is supported when following feature are enabled Bidirectional Forwarding Detection (BFD)

Attribute Name: bfd

Attribute Type: empty

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <debug>
    <config>
      </bfd><!-- operation="delete"-->
    </config>
  </debug>
</pim>

```

## Command Syntax

```
debug pim bfd
```

---

## IPI-PIM-IPV4

---

### Configure router id

Use this attribute to configure PIM router-ID to uniquely identify the router. By default, PIM registers for the NSM router-id service. This attribute will override the router-id received from NSM.

Attribute Name: router-id

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">

```

```

<ipv4>
<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
</instance>
</instances>
</ipv4>
</pim>

```

### Command Syntax

```
ip pim (vrf NAME|) router-id A.B.C.D
```

---

## Configure join prune interval

Use this attribute to set a PIM join/prune timer.

Attribute Name: join-prune-interval

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
<ipv4>
<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <join-prune-interval>1</join-prune-interval> <!-- operation="delete"-->
</instance>
</instances>
</ipv4>
</pim>

```

### Command Syntax

```
ip pim (vrf NAME|) jp-timer <1-65535>
```

---

## Configure ecmp bundle

Use this attribute to create an ECMP bundle.

Attribute Name: ecmp-bundle

Attribute Type: string

Attribute Range: 1-50

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ecmp-bundle>WORD</ecmp-bundle> <!-- operation="delete"-->
      </instance>
    </instances>
  </ipv4>
</pim>
```

**Command Syntax**

```
ip pim (vrf NAME|) ecmp-bundle WORD
```

---

**Configure enable bfd all interfaces**

Use this attribute to enable Bidirectional Forwarding Detection (BFD) on all interfaces.

Attribute Name: enable-bfd-all-interfaces

Attribute Type: empty

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        </enable-bfd-all-interfaces><!-- operation="delete"-->
      </instance>
    </instances>
  </ipv4>
</pim>
```

**Command Syntax**

```
ip pim (vrf NAME|) bfd all-interfaces
```

---

**Configure register reachability check**

Use this attribute to enable the RP reachability check for PIM Registers at the designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: register-reachability-check

Attribute Type: enum (disable|enable)

Default Value: enable

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <register-packet>
          <config>
            <register-reachability-check>enable</register-reachability-check> <!--
operation="delete"-->
          </config>
        </register-packet>
      </instance>
    </instances>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim (vrf NAME|) register-rp-reachability (disable|enable)
```

---

## Configure rate limit

Use this attribute to configure the rate of register packets sent by this designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: rate-limit

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <register-packet>
          <config>
            <rate-limit>1</rate-limit> <!-- operation="delete"-->
          </config>
        </register-packet>
      </instance>
    </instances>
  </ipv4>
</pim>
```

```
</instance>
</instances>
</ipv4>
</pim>
```

## Command Syntax

```
ip pim (vrf NAME|) register-rate-limit <1-65535>
```

---

## Configure suppress interval

Use this attribute to configure the register suppression time.

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: suppress-interval

Attribute Type: uint16

Default Value: 60

Attribute Range: 11-65535

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <suppress-interval>11</suppress-interval> <!-- operation="delete"-->
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv4>
  </pim>
```

## Command Syntax

```
ip pim (vrf NAME|) register-suppression <11-65535>
```

---

## Configure keep alive interval

Use this attribute to configure a Keep alive Timer (KAT) value for (S,G) states at RP to monitor PIM register packets.

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: keep-alive-interval

Attribute Type: uint16

Default Value: 185

Attribute Range: 1-65535

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <keep-alive-interval>1</keep-alive-interval> <!-- operation="delete"-->
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv4>
  </pim>
```

### Command Syntax

```
ip pim (vrf NAME|) rp-register-kat <1-65535>
```

---

## Configure source address

Use this attribute to configure the source address of register packets sent by this designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: source-address

Attribute Type: union

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <source-address>PIM_IPV4_REG_SOURCE_T</source-address>
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv4>
  </pim>
```



## Command Syntax

```
ip pim (vrf NAME|) register-source (A.B.C.D|IFNAME)
```

---

## Configure accept register

Use this attribute to configure the ACL of register packets accepted by this designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: accept-register

Attribute Type: string

Attribute Range: 1-64

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <accept-register>WORD</accept-register> <!-- operation="delete"-->
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv4>
  </pim>
```

## Command Syntax

```
ip pim (vrf NAME|) accept-register list WORD
```

---

## Configure ignore rp set priority

Use this attribute to ignore the RP-SET priority value, and use only the hashing mechanism for RP selection. This is used to inter-operate with older Cisco IOS versions.

Attribute Name: ignore-rp-set-priority

Attribute Type: empty

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
```

```

        <vrf-name>NAME</vrf-name>
    </config>
    <interop>
    <config>
        </ignore-rp-set-priority><!-- operation="delete"-->
    </config>
</interop>
</instance>
</instances>
</ipv4>
</pim>

```

### Command Syntax

```
ip pim (vrf NAME|) ignore-rp-set-priority
```

---

## Configure cisco bsr interop enable

Use this attribute to turn on or turn the Candidate-RP debugging timer working with Cisco BSR.

Attribute Name: cisco-bsr-interop-enable

Attribute Type: empty

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <interop>
          <config>
            </cisco-bsr-interop-enable><!-- operation="delete"-->
          </config>
        </interop>
      </instance>
    </instances>
  </ipv4>
</pim>

```

### Command Syntax

```
ip pim (vrf NAME|) crp-cisco-prefix
```

---

## Configure access control list

Use this attribute to configure the option to calculate the register checksum over the whole packet on multicast groups specified by the access control list.

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

Attribute Name: cisco-register-checksum-enable

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <interop>
            <register-packet>
              <config>
                </cisco-register-checksum-enable><!-- operation="delete"-->
                <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
              </config>
            </register-packet>
          </interop>
        </instance>
      </instances>
    </ipv4>
  </pim>
```

### Command Syntax

```
ip pim (vrf NAME|) cisco-register-checksum group-list WORD
```

## Configure cisco register checksum enable

Use this attribute to configure the option to calculate the register checksum over the whole packet. This is used to inter-operate with older Cisco IOS versions.

Attribute Name: cisco-register-checksum-enable

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <interop>
```

```

    <register-packet>
    <config>
        </cisco-register-checksum-enable>
    </config>
</register-packet>
</interop>
</instance>
</instances>
</ipv4>
</pim>

```

### Command Syntax

```
ip pim (vrf NAME|) cisco-register-checksum
```

---

## Configure vrf name

Use this attribute to enable the ability of the last-hop PIM router to switch to SPT for multicast group addresses indicated by the given standard access control list.

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <spt-switch>
          <config>
            </enable><!-- operation="delete"-->
            <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
          </config>
        </spt-switch>
      </instance>
    </instances>
  </ipv4>
</pim>

```

### Command Syntax

```
ip pim (vrf NAME|) spt-threshold group-list WORD
```

---

## Configure enable

Use this attribute to enable the ability of the last-hop PIM router to switch to SPT.

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <spt-switch>
          <config>
            </enable>
          </config>
        </spt-switch>
      </instance>
    </instances>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim (vrf NAME|) spt-threshold
```

---

## Configure range policy

Use this attribute to set Source Specific Multicast (SSM) and define the range of multicast IP addresses. Ranges can be either the default, which defines the SSM range as 232/8, or indicated by the given standard access control list.

This command is supported when following feature are enabled PIM Source Specific Multicast (SSM)

Attribute Name: range-policy

Attribute Type: union

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ssm>
          <config>
            <range-policy>PIM_IPV4_SSM_RANGE_POLICY_TYPE_T</range-policy>
          </config>
        </ssm>
      </instance>
    </instances>
  </ipv4>
</pim>
```

```

    </config>
  </ssm>
</instance>
</instances>
</ipv4>
</pim>

```

## Command Syntax

```
ip pim (vrf NAME|) ssm (range WORD|default)
```

---

## Configure member rp address

Destination IP address where register messages are copied and sent. A Member RP is an individual RP member in the anycast RP set.

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: member-rp-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <anycast-rps>
          <anycast-rp> <!-- operation="delete"-->
            <member-rp-address>A.B.C.D</member-rp-address>
            <config>
              <member-rp-address>A.B.C.D</member-rp-address>
              <anycast-rp-address>A.B.C.D</anycast-rp-address>
            </config>
            <anycast-rp-address>A.B.C.D</anycast-rp-address>
          </anycast-rp>
        </anycast-rps>
      </instance>
    </instances>
  </ipv4>
</pim>

```

## Command Syntax

```
ip pim (vrf NAME|) anycast-rp A.B.C.D A.B.C.D
```

---

## Configure rp address

Use this attribute to statically configure Rendezvous Point (RP) address for multicast groups.

Attribute Name: rp-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <rendezvous-point>
          <static-rps>
            <static-rps-default>
              <static-rp-default> <!-- operation="delete"-->
                <rp-address>A.B.C.D</rp-address>
              <config>
                <rp-address>A.B.C.D</rp-address>
              </config>
            </static-rp-default>
          </static-rps>
        </rendezvous-point>
      </instance>
    </instances>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim (vrf NAME|) rp-address A.B.C.D
```

## Configure override dynamically learned rp

Use this attribute to configure the flag to override dynamically learned RP mappings.

Attribute Name: override-dynamically-learned-rp

Attribute Type: empty

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
```

```

    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <rendezvous-point>
    <static-rps>
    <static-rps-default>
    <static-rp-default>
      <rp-address>A.B.C.D</rp-address>
    <config>
      <rp-address>A.B.C.D</rp-address>
      <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
    </config>
    </override-dynamically-learned-rp><!-- operation="delete"-->
  </static-rp-default>
</static-rps-default>
</static-rps>
</rendezvous-point>
</instance>
</instances>
</ipv4>
</pim>

```

## Command Syntax

```
ip pim (vrf NAME|) rp-address A.B.C.D WORD override
```

## Configure interface name

Use this attribute to configure the interface for the candidate BSR router.

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
    <instance>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <rendezvous-point>
      <bootstrap-router>
      <bsr-candidate>
      <config>
        <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
      </config>
    </bsr-candidate>

```



```

</bootstrap-router>
</rendezvous-point>
</instance>
</instances>
</ipv4>
</pim>

```

## Command Syntax

```
ip pim (vrf NAME|) bsr-candidate IFNAME
```

---

## Configure hash mask length

Use this attribute to configure the mask length used to calculate the group address for RP.

Attribute Name: hash-mask-length

Attribute Type: uint8

Attribute Range: 0-32

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <rendezvous-point>
          <bootstrap-router>
            <bsr-candidate>
              <config>
                <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
                <hash-mask-length>0</hash-mask-length> <!-- operation="delete"-->
              </config>
            </bsr-candidate>
          </bootstrap-router>
        </rendezvous-point>
      </instance>
    </instances>
  </ipv4>
</pim>

```

## Command Syntax

```
ip pim (vrf NAME|) bsr-candidate IFNAME <0-32>
```

---

## Configure priority

Use this attribute to configure the priority value for candidate BSR router.

Attribute Name: priority

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: hash-mask-length

Attribute Type: uint8

Attribute Range: 0-32

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <rendezvous-point>
          <bootstrap-router>
            <bsr-candidate>
              <config>
                <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
                <hash-mask-length>0</hash-mask-length> <!-- operation="delete"-->
                <priority>0</priority> <!-- operation="delete"-->
              </config>
            </bsr-candidate>
          </bootstrap-router>
        </rendezvous-point>
      </instance>
    </instances>
  </ipv4>
</pim>
```

## Command Syntax

```
ip pim (vrf NAME|) bsr-candidate IFNAME <0-32> <0-255>
```

---

## Configure advertisement interval

Use this attribute to configure the priority value for RP candidate.

Attribute Name: priority

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

Attribute Name: advertisement-interval

Attribute Type: uint16

Attribute Range: 1-16383

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <rendezvous-point>
          <rp-candidates>
            <rp-candidate>
              <interface-name>IFNAME</interface-name>
              <config>
                <interface-name>IFNAME</interface-name>
                <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
              </config>
            </rp-candidate>
          </rp-candidates>
        </rendezvous-point>
        <advertisement-interval>1</advertisement-interval> <!-- operation="delete"-->
      </instance>
    </instances>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim (vrf NAME|) rp-candidate IFNAME (group-list WORD|) (interval <1-16383>|)
(priority <0-255>|)
```

## Configure originator id

Use this attribute to allow a Multicast Source Discovery Protocol (MSDP) speaker that originates a Source-Active (SA) message to use the IP address of an interface as a rendezvous point (RP) address in the SA message.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: originator-id

Attribute Type: string

Attribute Range: 1-33

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>
          <config>
            <originator-id>IFNAME</originator-id> <!-- operation="delete"-->
          </config>
        </msdp>
      </instance>
    </instances>
  </ipv4>
</pim>
```

### Command Syntax

```
ip msdp (vrf NAME|) originator-id IFNAME
```

---

## Configure group address

Use this attribute to configure an Multicast Source Discovery Protocol (MSDP) remote group.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: group-address

Attribute Type: inet:ipv4-address

Attribute Name: rp-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>
          <source-active-entries>
            <source-active-entry> <!-- operation="delete"-->
          </source-active-entries>
        </msdp>
      </instance>
    </instances>
  </ipv4>
</pim>
```

```

    <group-address>A.B.C.D</group-address>
    <config>
      <group-address>A.B.C.D</group-address>
      <source-address>A.B.C.D</source-address>
      <rp-address>A.B.C.D</rp-address>
    </config>
    <source-address>A.B.C.D</source-address>
  </source-active-entry>
</source-active-entries>
</msdp>
</instance>
</instances>
</ipv4>
</pim>

```

## Command Syntax

```
ip msdp (vrf NAME|) sa s A.B.C.D g A.B.C.D r A.B.C.D
```

## Configure address

Use this attribute to configure an Multicast Source Discovery Protocol (MSDP) peer relationship.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>
          <peers>
            <peer> <!-- operation="delete"-->
              <address>A.B.C.D</address>
              <config>
                <address>A.B.C.D</address>
              </config>
            </peer>
          </peers>
        </msdp>
      </instance>
    </instances>
  </ipv4>
</pim>

```

## Command Syntax

```
ip msdp (vrf NAME|) peer A.B.C.D
```

---

## Configure mesh group

Use this attribute to configure an Multicast Source Discovery Protocol (MSDP) peer relationship.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: address

Attribute Type: inet:ipv4-address

Attribute Name: mesh-group

Attribute Type: string

Attribute Range: 1-64

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>
          <peers>
            <peer>
              <address>A.B.C.D</address>
              <config>
                <address>A.B.C.D</address>
                <mesh-group>WORD</mesh-group> <!-- operation="delete"-->
              </config>
            </peer>
          </peers>
        </msdp>
      </instance>
    </instances>
  </ipv4>
</pim>
```

## Command Syntax

```
ip msdp (vrf NAME|) mesh-group WORD A.B.C.D
```

---

## Configure default peer

Use this attribute to configure an Multicast Source Discovery Protocol (MSDP) peer relationship.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: address

Attribute Type: inet:ipv4-address

Attribute Name: default-peer

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>
          <peers>
            <peer>
              <address>A.B.C.D</address>
              <config>
                <address>A.B.C.D</address>
                </default-peer><!-- operation="delete"-->
              </config>
            </peer>
          </peers>
        </msdp>
      </instance>
    </instances>
  </ipv4>
</pim>
```

### Command Syntax

```
ip msdp (vrf NAME|) default-peer A.B.C.D
```

## Configure prefix list

Use this attribute to set a Multicast Source Discovery Protocol (MSDP) peer from which to accept Source-Active (SA) messages. You can have multiple active default peers: 1. When you enter multiple ip msdp default-peer commands with a prefix-list keyword, all the default peers are used at the same time for different RP prefixes. This form is typically used in a service provider cloud that connects stub site clouds. 2. When you enter multiple ip msdp default-peer commands without a prefix-list keyword, a single active peer accepts all SA messages. If that peer fails, the next configured default peer accepts all SA messages. This form is typically used at a stub site.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: prefix-list

Attribute Type: union

Attribute Name: default-peer

Attribute Type: empty

**Netconf edit-config payload**

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>
          <peers>
            <peer>
              <address>A.B.C.D</address>
              <config>
                <address>A.B.C.D</address>
                </default-peer><!-- operation="delete"-->
              </config>
              <prefix-list>PIM_IPV4_MSDP_PEER_ACL_T</prefix-list>
            </peer>
          </peers>
        </msdp>
      </instance>
    </instances>
  </ipv4>
</pim>

```

**Command Syntax**

```
ip msdp (vrf NAME|) default-peer A.B.C.D prefix-list (WORD|<1-99>)
```

**Configure password**

Use this command to set an password key used for authenticating a Multicast Source Discovery Protocol (MSDP) peer. By default, no password is enabled.

This command is supported when following feature are enabled HAVE\_PIM\_MSDP

Attribute Name: password

Attribute Type: string

Attribute Range: 1-162

**Netconf edit-config payload**

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <msdp>

```



```

<peers>
<peer>
  <address>A.B.C.D</address>
  <config>
    <address>A.B.C.D</address>
  </config>
  <authentication>
  <config>
    <password>WORD</password> <!-- operation="delete"-->
  </config>
</authentication>
</peer>
</peers>
</msdp>
</instance>
</instances>
</ipv4>
</pim>

```

## Command Syntax

```
ip msdp (vrf NAME|) password WORD peer A.B.C.D
```

## Configure options

Use this attribute to debug the PIM IPv4 feature.

Attribute Name: options

Attribute Type: bits (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
<ipv4>
<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <debug>
  <config>
    <options>all</options> <!-- operation="delete"-->
  </config>
</debug>
</instance>
</instances>
</ipv4>
</pim>

```

## Command Syntax

```
debug ip pim (vrf NAME|) (all|events|packet|packet in|packet
out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer
hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune
ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr
bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)
```

---

## Configure passive enable

PIM IPv4 passive mode.

Attribute Name: passive-enable

Attribute Type: empty

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          <pim-mode>dense-mode</pim-mode> <!-- operation="delete"-->
        </config>
        </passive-enable><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv4>
</pim>
```

## Command Syntax

```
ip pim (dense-mode|sparse-mode) passive
```

---

## Configure pim mode

PIM IPv4 mode to use when delivering multicast traffic via this interface.

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
```

```

    <name>WORD</name>
  </config>
  <pim-mode>dense-mode</pim-mode> <!-- operation="delete"-->
</interface>
</interfaces>
</ipv4>
</pim>

```

## Command Syntax

```
ip pim (dense-mode|sparse-mode)
```

---

## Configure bsr border

When set to true the device will not send bootstrap router messages over this interface. By default these are transmitted over all PIM IPv4 sparse mode (PIM-SM) enabled interfaces.

Attribute Name: bsr-border

Attribute Type: empty

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </bsr-border><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv4>
</pim>

```

## Command Syntax

```
ip pim bsr-border
```

---

## Configure dr priority

The designated router priority of this interface. Larger always preferred.

Attribute Name: dr-priority

Attribute Type: uint32

Attribute Range: 0-4294967294

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>

```

```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <dr-priority>0</dr-priority> <!-- operation="delete"-->
</interface>
</interfaces>
</ipv4>
</pim>

```

### Command Syntax

```
ip pim dr-priority <0-4294967294>
```

---

## Configure hello interval

Use this attribute to configure a hello interval value other than the default. When a hello-interval is configured and hello-holdtime is not configured, or when the hello-holdtime value configured is less than the new hello-interval value, the holdtime value is modified to (3.5 \* hello\_interval). Otherwise, the hello-holdtime value is the configured value.

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 30

Attribute Range: 1-18724

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <hello-interval>1</hello-interval> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv4>
</pim>

```

### Command Syntax

```
ip pim hello-interval <1-18724>
```

---

## Configure hello holdtime

Use this attribute to configure a hello message holdtime other than the default.

Attribute Name: hello-holdtime

Attribute Type: uint16

Default Value: 105

Attribute Range: 1-65535

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <hello-holdtime>1</hello-holdtime> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim hello-holdtime <1-65535>
```

---

## Configure exclude generated id

Exclude Gen-id option from PIM IPv4 Hello packets on this interface.

Attribute Name: exclude-generated-id

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </exclude-generated-id><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim exclude-genid
```

---

## Configure unicast bootstrap router

Use this attribute to enable support for sending and receiving unicast Bootstrap Messages (BSM) on an interface.

Attribute Name: unicast-bootstrap-router

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </interface>
    </interfaces>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim unicast-bsm
```

---

## Configure neighbor access control list filter

Use this attribute to enable filtering of neighbors on the interface. When configuring a neighbor filter, PIM IPv4 either not establishes adjacency with neighbor or terminates adjacency with existing neighbors, when denied by filtering access list.

Attribute Name: neighbor-access-control-list-filter

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      <neighbor-access-control-list-filter>WORD</neighbor-access-control-list-
filter> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ipv4>
</pim>
```

### Command Syntax

```
ip pim neighbor-filter WORD
```

---

## Configure state refresh origination interval

Use this attribute to configure a PIM-DM State-Refresh origination interval other than the default value. The origination interval is the number of seconds between PIM-DM State Refresh control messages.

Attribute Name: state-refresh-origination-interval

Attribute Type: uint16

Default Value: 60

Attribute Range: 1-100

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <state-refresh-origination-interval>1</state-refresh-origination-interval>
<!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv4>
</pim>
```

### Command Syntax

```
ip pim state-refresh origination-interval <1-100>
```

---

## Configure name

Use this attribute to configure an ECMP bundle.

Attribute Name: ecmp-bundle

Attribute Type: string

Attribute Range: 1-50

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <ecmp-bundle>WORD</ecmp-bundle> <!-- operation="delete"-->
      </interface>
    </interfaces>
```

```
</ipv4>
</pim>
```

## Command Syntax

```
ip pim bind ecmp-bundle WORD
```

---

## Configure propagation delay

Propagation-delay value.

Attribute Name: propagation-delay

Attribute Type: uint16

Default Value: 1000

Attribute Range: 0-32767

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
          <propagation-delay>0</propagation-delay> <!-- operation="delete"-->
        </interface>
      </interfaces>
    </ipv4>
  </pim>
```

## Command Syntax

```
ip pim propagation-delay <0-32767>
```

---

## Configure enable bfd

Use this attribute to configure Bidirectional Forwarding Detection.

Attribute Name: enable-bfd

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
        </interface>
      </interfaces>
    </ipv4>
  </pim>
```



```

        <enable-bfd>enable</enable-bfd> <!-- operation="delete"-->
</interface>
</interfaces>
</ipv4>
</pim>

```

## Command Syntax

```
ip pim bfd (disable|)
```

---

## Configure virtual router id

Use this attribute to set the designated router's priority value.

This command is supported when following feature are enabled HAVE\_PIM\_SM\_VRRP\_AWARE

Attribute Name: dr-priority

Attribute Type: uint32

Attribute Range: 0-4294967294

Attribute Name: virtual-router-id

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv4>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
          <pim-redundancy>
            <vrrp>
              <config>
                <virtual-router-id>1</virtual-router-id>
                <dr-priority>0</dr-priority>
              </config>
            </vrrp>
          </pim-redundancy>
        </interface>
      </interfaces>
    </ipv4>
  </pim>

```

## Command Syntax

```
ip pim redundancy <1-255> vrrp dr-priority <0-4294967294>
```

---

## snmp restart pim

### Netconf RPC payload

```
<ipi-pim-ipv4_pim-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim"/>
```

### Command Syntax

```
snmp restart pim
```

---

## clear ip pim (vrf NAME|) (sparse-mode) bsr rp-set \*

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: pim-mode

Attribute Type: enum (sparse-mode)

### Netconf RPC payload

```
<ipi-pim-ipv4_pim-ipv4-clear-bsr-rendezvous-point xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <pim-mode>sparse-mode</pim-mode>
</ipi-pim-ipv4_pim-ipv4-clear-bsr-rendezvous-point>
```

### Command Syntax

```
clear ip pim (vrf NAME|) (sparse-mode) bsr rp-set *
```

---

## clear ip mroute (vrf NAME|) \* pim (dense-mode|sparse-mode)

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

### Netconf RPC payload

```
<ipi-pim-ipv4_pim-ipv4-clear-multicast-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <pim-mode>dense-mode</pim-mode>
</ipi-pim-ipv4_pim-ipv4-clear-multicast-route>
```

### Command Syntax

```
clear ip mroute (vrf NAME|) * pim (dense-mode|sparse-mode)
```

---

## clear ip mroute (vrf NAME|) A.B.C.D pim sparse-mode

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-address

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<ipi-pim-ipv4_pim-ipv4-clear-multicast-route-source-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
</ipi-pim-ipv4_pim-ipv4-clear-multicast-route-source-group>
```

### Command Syntax

```
clear ip mroute (vrf NAME|) A.B.C.D pim sparse-mode
```

---

## clear ip mroute (vrf NAME|) A.B.C.D A.B.C.D pim (dense-mode|sparse-mode)

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-address

Attribute Type: inet:ipv4-address

Attribute Name: source-address

Attribute Type: inet:ipv4-address

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

### Netconf RPC payload

```
<ipi-pim-ipv4_pim-ipv4-clear-multicast-route-source-group-mode xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
  <source-address>A.B.C.D</source-address>
  <pim-mode>dense-mode</pim-mode>
</ipi-pim-ipv4_pim-ipv4-clear-multicast-route-source-group-mode>
```

### Command Syntax

```
clear ip mroute (vrf NAME|) A.B.C.D A.B.C.D pim (dense-mode|sparse-mode)
```

---

## clear ip msdp (vrf NAME|) peer (A.B.C.D|)

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: address

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```

<ipi-pim-ipv4_pim-ipv4-clear-msdp-peer xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <address>A.B.C.D</address>
</ipi-pim-ipv4_pim-ipv4-clear-msdp-peer>

```

### Command Syntax

```
clear ip msdp (vrf NAME|) peer (A.B.C.D|)
```

## clear ip msdp (vrf NAME|) sa-cache (A.B.C.D|)

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-address

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```

<ipi-pim-ipv4_pim-ipv4-clear-msdp-sa-cache xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
</ipi-pim-ipv4_pim-ipv4-clear-msdp-sa-cache>

```

### Command Syntax

```
clear ip msdp (vrf NAME|) sa-cache (A.B.C.D|)
```

## debug ip pim (vrf NAME|) (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)

## Netconf RPC payload

```
<ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-on>
```

## Command Syntax

```
debug ip pim (vrf NAME|) (all|events|packet|packet in|packet
out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer
hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune
ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr
bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)
```

---

**no debug ip pim (vrf NAME|) (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)**

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)

## Netconf RPC payload

```
<ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-off>
```

## Command Syntax

```
no debug ip pim (vrf NAME|) (all|events|packet|packet in|packet
out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer
hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune
ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr
bst|timer bsr crp|mib|nsm|nexthop|mtrace|msdp)
```

## debug ip pim (vrf NAME|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

**Netconf RPC payload**

```
<ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-all-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
</ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-all-on>
```

**Command Syntax**

```
debug ip pim (vrf NAME|)
```

---

**no debug ip pim (vrf NAME|)**

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

**Netconf RPC payload**

```
<ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-all-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
</ipi-pim-ipv4-debug_pim-ipv4-terminal-debug-all-off>
```

**Command Syntax**

```
no debug ip pim (vrf NAME|)
```

---

**IPI-PIM-IPV6**

---

**Configure router id**

Use this attribute to configure PIM router-ID to uniquely identify the router. By default, PIM registers for the NSM router-id service. This attribute will override the router-id received from NSM.

Attribute Name: router-id

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <router-id>A.B.C.D</router-id> <!-- operation="delete"-->
      </instance>
    </instances>
  </ipv6>
```

---

```
</pim>
```

## Command Syntax

```
ipv6 pim (vrf NAME|) router-id A.B.C.D
```

---

## Configure join prune interval

Use this attribute to set a PIM join/prune timer.

Attribute Name: join-prune-interval

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <join-prune-interval>1</join-prune-interval> <!-- operation="delete"-->
        </instance>
      </instances>
    </ipv6>
  </pim>
```

## Command Syntax

```
ipv6 pim (vrf NAME|) jp-timer <1-65535>
```

---

## Configure ecmp bundle

Use this attribute to create an ECMP bundle.

Attribute Name: ecmp-bundle

Attribute Type: string

Attribute Range: 1-50

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <ecmp-bundle>WORD</ecmp-bundle> <!-- operation="delete"-->
        </instance>
      </instances>
    </ipv6>
  </pim>
```

```

</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) ecmp-bundle WORD
```

---

## Configure enable bfd all interfaces

Use this attribute to enable Bidirectional Forwarding Detection (BFD) on all interfaces.

Attribute Name: enable-bfd-all-interfaces

Attribute Type: empty

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        </enable-bfd-all-interfaces><!-- operation="delete"-->
      </instance>
    </instances>
  </ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) bfd all-interfaces
```

---

## Configure register reachability check

Use this attribute to enable the RP reachability check for PIM Registers at the designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: register-reachability-check

Attribute Type: enum (disable|enable)

Default Value: enable

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>

```



```

        <vrf-name>NAME</vrf-name>
    </config>
    <register-packet>
    <config>
        <register-reachability-check>enable</register-reachability-check> <!--
operation="delete"-->
    </config>
</register-packet>
</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) register-rp-reachability (disable|enable)
```

---

## Configure rate limit

Use this attribute to configure the rate of register packets sent by this designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: rate-limit

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <rate-limit>1</rate-limit> <!-- operation="delete"-->
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv6>
  </pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) register-rate-limit <1-65535>
```

---

## Configure suppress interval

Use this attribute to configure the register suppression time.

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: suppress-interval

Attribute Type: uint16

Default Value: 60

Attribute Range: 11-65535

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <suppress-interval>11</suppress-interval> <!-- operation="delete"-->
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv6>
  </pim>
```

### Command Syntax

```
ipv6 pim (vrf NAME|) register-suppression <11-65535>
```

---

## Configure keep alive interval

Use this attribute to configure a Keep alive Timer (KAT) value for (S,G) states at RP to monitor PIM register packets.

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: keep-alive-interval

Attribute Type: uint16

Default Value: 185

Attribute Range: 1-65535

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
```

```

    <config>
      <vrf-name>NAME</vrf-name>
    </config>
  <register-packet>
    <config>
      <keep-alive-interval>1</keep-alive-interval> <!-- operation="delete"-->
    </config>
  </register-packet>
</instance>
</instances>
</ipv6>
</pim>

```

### Command Syntax

```
ipv6 pim (vrf NAME|) rp-register-kat <1-65535>
```

---

## Configure source address

Use this attribute to configure the source address of register packets sent by this designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: source-address

Attribute Type: union

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <register-packet>
            <config>
              <source-address>PIM_IPV6_REG_SOURCE_T</source-address>
            </config>
          </register-packet>
        </instance>
      </instances>
    </ipv6>
  </pim>

```

### Command Syntax

```
ipv6 pim (vrf NAME|) register-source (X:X::X:X|IFNAME)
```

---

## Configure accept register

Use this attribute to configure the ACL of register packets accepted by this designated router (DR).

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: accept-register

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <register-packet>
          <config>
            <accept-register>WORD</accept-register> <!-- operation="delete"-->
          </config>
        </register-packet>
      </instance>
    </instances>
  </ipv6>
</pim>
```

### Command Syntax

```
ipv6 pim (vrf NAME|) accept-register list WORD
```

---

## Configure ignore rp set priority

Use this attribute to ignore the RP-SET priority value, and use only the hashing mechanism for RP selection. This is used to inter-operate with older Cisco IOS versions.

Attribute Name: ignore-rp-set-priority

Attribute Type: empty

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <interop>
          <config>
            </ignore-rp-set-priority><!-- operation="delete"-->
          </config>
        </interop>
      </instance>
    </instances>
  </ipv6>
</pim>
```

```

</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) ignore-rp-set-priority
```

---

## Configure cisco bsr interop enable

Use this attribute to turn on or turn the Candidate-RP debugging timer working with Cisco BSR.

Attribute Name: cisco-bsr-interop-enable

Attribute Type: empty

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <interop>
            <config>
              </cisco-bsr-interop-enable><!-- operation="delete"-->
            </config>
          </interop>
        </instance>
      </instances>
    </ipv6>
  </pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) crp-cisco-prefix
```

---

## Configure access control list

Use this attribute to configure the option to calculate the register checksum over the whole packet on multicast groups specified by the access control list.

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

Attribute Name: cisco-register-checksum-enable

Attribute Type: empty

**Netconf edit-config payload**

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <interop>
          <register-packet>
            <config>
              </cisco-register-checksum-enable><!-- operation="delete"-->
              <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
            </config>
          </register-packet>
        </interop>
      </instance>
    </instances>
  </ipv6>
</pim>

```

**Command Syntax**

```
ipv6 pim (vrf NAME|) cisco-register-checksum group-list WORD
```

**Configure cisco register checksum enable**

Use this attribute to configure the option to calculate the register checksum over the whole packet. This is used to inter-operate with older Cisco IOS versions.

Attribute Name: cisco-register-checksum-enable

Attribute Type: empty

**Netconf edit-config payload**

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <interop>
          <register-packet>
            <config>
              </cisco-register-checksum-enable>
            </config>
          </register-packet>
        </interop>
      </instance>
    </instances>
  </ipv6>
</pim>

```

```

</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) cisco-register-checksum
```

---

## Configure vrf name

Use this attribute to enable the ability of the last-hop PIM router to switch to SPT for multicast group addresses indicated by the given standard access control list.

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

Attribute Name: enable

Attribute Type: empty

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <spt-switch>
            <config>
              </enable><!-- operation="delete"-->
              <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
            </config>
          </spt-switch>
        </instance>
      </instances>
    </ipv6>
  </pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) spt-threshold group-list WORD
```

---

## Configure enable

Use this attribute to enable the ability of the last-hop PIM router to switch to SPT.

Attribute Name: enable

Attribute Type: empty

**Netconf edit-config payload**

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <spt-switch>
          <config>
            </enable>
          </config>
        </spt-switch>
      </instance>
    </instances>
  </ipv6>
</pim>

```

**Command Syntax**

```
ipv6 pim (vrf NAME|) spt-threshold
```

---

**Configure range policy**

Use this attribute to set Source Specific Multicast (SSM) and define the range of multicast IP addresses. Ranges can be either the default, which defines the SSM range as FF3x::/96, or indicated by the given standard access control list.

This command is supported when following feature are enabled PIM Source Specific Multicast (SSM)

Attribute Name: range-policy

Attribute Type: union

**Netconf edit-config payload**

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ssm>
          <config>
            <range-policy>PIM_IPV6_SSM_RANGE_POLICY_TYPE_T</range-policy>
          </config>
        </ssm>
      </instance>
    </instances>
  </ipv6>
</pim>

```



## Command Syntax

```
ipv6 pim (vrf NAME|) ssm (range WORD|default)
```

---

## Configure member rp address

Destination IPv6 address where register messages are copied and sent. A Member RP is an individual RP member in the anycast RP set.

This command is supported when following feature are enabled PIM Sparse Mode (SM)

Attribute Name: member-rp-address

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <anycast-rps>
          <anycast-rp> <!-- operation="delete"-->
            <member-rp-address>X:X::X:X</member-rp-address>
            <config>
              <member-rp-address>X:X::X:X</member-rp-address>
              <anycast-rp-address>X:X::X:X</anycast-rp-address>
            </config>
            <anycast-rp-address>X:X::X:X</anycast-rp-address>
          </anycast-rp>
        </anycast-rps>
      </instance>
    </instances>
  </ipv6>
</pim>
```

## Command Syntax

```
ipv6 pim (vrf NAME|) anycast-rp X:X::X:X X:X::X:X
```

---

## Configure embed rp

Use this attribute to embed the PIM Rendezvous Point

Attribute Name: embed-rp

Attribute Type: enum (disable|enable)

Default Value: enable

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
```

```

<ipv6>
<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <rendezvous-point>
  <config>
    <embed-rp>enable</embed-rp> <!-- operation="delete"-->
  </config>
</rendezvous-point>
</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) rp embedded (disable|enable)
```

## Configure rp address

Use this attribute to statically configure Rendezvous Point (RP) address for multicast groups.

Attribute Name: rp-address

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
<ipv6>
<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <rendezvous-point>
  <static-rps>
  <static-rps-default>
  <static-rp-default> <!-- operation="delete"-->
    <rp-address>X:X::X:X</rp-address>
  <config>
    <rp-address>X:X::X:X</rp-address>
  </config>
  </static-rp-default>
</static-rps-default>
</static-rps>
</rendezvous-point>
</instance>
</instances>

```

```
</ipv6>
</pim>
```

## Command Syntax

```
ipv6 pim (vrf NAME|) rp-address X:X::X:X
```

---

## Configure override dynamically learned rp

Use this attribute to configure the flag to override dynamically learned RP mappings.

Attribute Name: override-dynamically-learned-rp

Attribute Type: empty

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <rendezvous-point>
            <static-rps>
              <static-rps-default>
                <static-rp-default>
                  <rp-address>X:X::X:X</rp-address>
                  <config>
                    <rp-address>X:X::X:X</rp-address>
                    <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
                  </config>
                </static-rp-default>
              </static-rps-default>
            </static-rps>
          </rendezvous-point>
        </instance>
      </instances>
    </ipv6>
  </pim>
```

## Command Syntax

```
ipv6 pim (vrf NAME|) rp-address X:X::X:X WORD override
```

---

## Configure interface name

Use this attribute to configure the interface for the candidate BSR router.

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <rendezvous-point>
            <bootstrap-router>
              <bsr-candidate>
                <config>
                  <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
                </config>
              </bsr-candidate>
            </bootstrap-router>
          </rendezvous-point>
        </instance>
      </instances>
    </ipv6>
  </pim>
```

### Command Syntax

```
ipv6 pim (vrf NAME|) bsr-candidate IFNAME
```

---

## Configure hash mask length

Use this attribute to configure the mask length used to calculate the group address for RP.

Attribute Name: hash-mask-length

Attribute Type: uint8

Attribute Range: 0-32

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
```

```

<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <rendezvous-point>
  <bootstrap-router>
  <bsr-candidate>
  <config>
    <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
    <hash-mask-length>0</hash-mask-length> <!-- operation="delete"-->
  </config>
</bsr-candidate>
</bootstrap-router>
</rendezvous-point>
</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) bsr-candidate IFNAME <0-32>
```

---

## Configure priority

Use this attribute to configure the priority value for candidate BSR router.

Attribute Name: priority

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: interface-name

Attribute Type: string

Attribute Range: 1-33

Attribute Name: hash-mask-length

Attribute Type: uint8

Attribute Range: 0-32

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
<ipv6>
<instances>
<instance>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>

```

```

    <rendezvous-point>
    <bootstrap-router>
    <bsr-candidate>
    <config>
        <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
        <hash-mask-length>0</hash-mask-length> <!-- operation="delete"-->
        <priority>0</priority> <!-- operation="delete"-->
    </config>
</bsr-candidate>
</bootstrap-router>
</rendezvous-point>
</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (vrf NAME|) bsr-candidate IFNAME <0-32> <0-255>
```

---

## Configure advertisement interval

Use this attribute to configure the priority value for RP candidate.

Attribute Name: priority

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: access-control-list

Attribute Type: string

Attribute Range: 1-64

Attribute Name: advertisement-interval

Attribute Type: uint16

Attribute Range: 1-16383

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
<ipv6>
<instances>
<instance>
    <vrf-name>NAME</vrf-name>
    <config>
        <vrf-name>NAME</vrf-name>
    </config>
    <rendezvous-point>
    <rp-candidates>
    <rp-candidate>
        <interface-name>IFNAME</interface-name>
    </config>

```

```

        <interface-name>IFNAME</interface-name>
        <access-control-list>WORD</access-control-list> <!-- operation="delete"-->
    >
        <advertisement-interval>1</advertisement-interval> <!--
operation="delete"-->
        </config>
        <priority>0</priority> <!-- operation="delete"-->
    </rp-candidate>
</rp-candidates>
</rendezvous-point>
</instance>
</instances>
</ipv6>
</pim>

```

## Command Syntax

```

ipv6 pim (vrf NAME|) rp-candidate IFNAME (group-list WORD|) (interval <1-16383>|)
(priority <0-255>|)

```

## Configure options

Use this attribute to debug the PIM IPv6 feature.

Attribute Name: options

Attribute Type: bits (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace)

## Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <instances>
      <instance>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <debug>
          <config>
            <options>all</options> <!-- operation="delete"-->
          </config>
        </debug>
      </instance>
    </instances>
  </ipv6>
</pim>

```

## Command Syntax

```

debug ipv6 pim (vrf NAME|) (all|events|packet|packet in|packet
out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer
hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune

```

```
ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr
bst|timer bsr crp|mib|nsm|nexthop|mtrace)
```

---

## Configure passive enable

PIM IPv6 passive mode.

Attribute Name: passive-enable

Attribute Type: empty

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          <pim-mode>dense-mode</pim-mode> <!-- operation="delete"-->
        </config>
        </passive-enable><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>
```

### Command Syntax

```
ipv6 pim (dense-mode|sparse-mode) passive
```

---

## Configure pim mode

PIM IPv6 mode to use when delivering multicast traffic via this interface.

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          <pim-mode>dense-mode</pim-mode> <!-- operation="delete"-->
        </config>
      </interface>
    </interfaces>
  </ipv6>
</pim>
```



```

</interfaces>
</ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim (dense-mode|sparse-mode)
```

---

## Configure bsr border

When set to true the device will not send bootstrap router messages over this interface. By default these are transmitted over all PIM IPv6 sparse mode (PIM-SM) enabled interfaces.

Attribute Name: bsr-border

Attribute Type: empty

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </bsr-border><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>

```

## Command Syntax

```
ipv6 pim bsr-border
```

---

## Configure dr priority

The designated router priority of this interface. Larger always preferred.

Attribute Name: dr-priority

Attribute Type: uint32

Attribute Range: 0-4294967294

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </interface>
    </interfaces>
  </ipv6>
</pim>

```

```

        <dr-priority>0</dr-priority> <!-- operation="delete"-->
</interface>
</interfaces>
</ipv6>
</pim>

```

### Command Syntax

```
ipv6 pim dr-priority <0-4294967294>
```

---

## Configure hello interval

Use this attribute to configure a hello interval value other than the default. When a hello-interval is configured and hello-holdtime is not configured, or when the hello-holdtime value configured is less than the new hello-interval value, the holdtime value is modified to (3.5 \* hello\_interval). Otherwise, the hello-holdtime value is the configured value.

Attribute Name: hello-interval

Attribute Type: uint16

Default Value: 30

Attribute Range: 1-18724

### Netconf edit-config payload

```

<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <hello-interval>1</hello-interval> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>

```

### Command Syntax

```
ipv6 pim hello-interval <1-18724>
```

---

## Configure hello holdtime

Use this attribute to configure a hello message holdtime other than the default.

Attribute Name: hello-holdtime

Attribute Type: uint16

Default Value: 105

Attribute Range: 1-65535

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <hello-holdtime>1</hello-holdtime> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>
```

**Command Syntax**

```
ipv6 pim hello-holdtime <1-65535>
```

---

**Configure exclude generated id**

Exclude Gen-id option from PIM IPv6 Hello packets on this interface.

Attribute Name: exclude-generated-id

Attribute Type: empty

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </exclude-generated-id><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>
```

**Command Syntax**

```
ipv6 pim exclude-genid
```

---

**Configure unicast bootstrap router**

Use this attribute to enable support for sending and receiving unicast Bootstrap Messages (BSM) on an interface.

Attribute Name: unicast-bootstrap-router

Attribute Type: empty

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </unicast-bootstrap-router><!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>
```

**Command Syntax**

```
ipv6 pim unicast-bsm
```

---

**Configure neighbor access control list filter**

Use this attribute to enable filtering of neighbors on the interface. When configuring a neighbor filter, PIM IPv6 either not establishes adjacency with neighbor or terminates adjacency with existing neighbors, when denied by filtering access list.

Attribute Name: neighbor-access-control-list-filter

Attribute Type: string

Attribute Range: 1-64

**Netconf edit-config payload**

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <neighbor-access-control-list-filter>WORD</neighbor-access-control-list-
filter> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>
```

**Command Syntax**

```
ipv6 pim neighbor-filter WORD
```

---

## Configure state refresh origination interval

Use this attribute to configure a PIM-DM State-Refresh origination interval other than the default value. The origination interval is the number of seconds between PIM-DM State Refresh control messages.

Attribute Name: state-refresh-origination-interval

Attribute Type: uint16

Default Value: 60

Attribute Range: 1-100

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <state-refresh-origination-interval>1</state-refresh-origination-interval>
<!-- operation="delete"-->
      </interface>
    </interfaces>
  </ipv6>
</pim>
```

### Command Syntax

```
ipv6 pim state-refresh origination-interval <1-100>
```

---

## Configure name

Use this attribute to configure an ECMP bundle.

Attribute Name: ecmp-bundle

Attribute Type: string

Attribute Range: 1-50

### Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <ecmp-bundle>WORD</ecmp-bundle> <!-- operation="delete"-->
      </interface>
    </interfaces>
```

```
</ipv6>
</pim>
```

## Command Syntax

```
ipv6 pim bind ecmp-bundle WORD
```

---

## Configure propagation delay

Propagation-delay value.

Attribute Name: propagation-delay

Attribute Type: uint16

Default Value: 1000

Attribute Range: 0-32767

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
          <propagation-delay>0</propagation-delay> <!-- operation="delete"-->
        </interface>
      </interfaces>
    </ipv6>
  </pim>
```

## Command Syntax

```
ipv6 pim propagation-delay <0-32767>
```

---

## Configure enable bfd

Use this attribute to configure Bidirectional Forwarding Detection.

Attribute Name: enable-bfd

Attribute Type: enum (disable|enable)

## Netconf edit-config payload

```
<pim xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <ipv6>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
        </interface>
      </interfaces>
    </ipv6>
  </pim>
```

```

        <enable-bfd>enable</enable-bfd> <!-- operation="delete"-->
    </interface>
</interfaces>
</ipv6>
</pim>

```

### Command Syntax

```
ipv6 pim bfd (disable|)
```

---

## clear ipv6 pim (vrf NAME|) (sparse-mode) bsr rp-set \*

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: pim-mode

Attribute Type: enum (sparse-mode)

### Netconf RPC payload

```

<ipi-pim-ipv6_pim-ipv6-clear-bsr-rendezvous-point xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <pim-mode>sparse-mode</pim-mode>
</ipi-pim-ipv6_pim-ipv6-clear-bsr-rendezvous-point>

```

### Command Syntax

```
clear ipv6 pim (vrf NAME|) (sparse-mode) bsr rp-set *
```

---

## clear ipv6 mroute (vrf NAME|) \* pim (dense-mode|sparse-mode)

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

### Netconf RPC payload

```

<ipi-pim-ipv6_pim-ipv6-clear-multicast-route xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <pim-mode>dense-mode</pim-mode>
</ipi-pim-ipv6_pim-ipv6-clear-multicast-route>

```

### Command Syntax

```
clear ipv6 mroute (vrf NAME|) * pim (dense-mode|sparse-mode)
```

---

## clear ipv6 mroute (vrf NAME|) X:X::X:X pim sparse-mode

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-address

Attribute Type: inet:ipv6-address

### Netconf RPC payload

```
<ipi-pim-ipv6_pim-ipv6-clear-multicast-route-source-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
</ipi-pim-ipv6_pim-ipv6-clear-multicast-route-source-group>
```

### Command Syntax

```
clear ipv6 mroute (vrf NAME|) X:X::X:X pim sparse-mode
```

---

## clear ipv6 mroute (vrf NAME|) X:X::X:X X:X::X:X pim (dense-mode|sparse-mode)

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-address

Attribute Type: inet:ipv6-address

Attribute Name: source-address

Attribute Type: inet:ipv6-address

Attribute Name: pim-mode

Attribute Type: enum (dense-mode|sparse-mode)

### Netconf RPC payload

```
<ipi-pim-ipv6_pim-ipv6-clear-multicast-route-source-group-mode xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
  <source-address>X:X::X:X</source-address>
  <pim-mode>dense-mode</pim-mode>
</ipi-pim-ipv6_pim-ipv6-clear-multicast-route-source-group-mode>
```

### Command Syntax

```
clear ipv6 mroute (vrf NAME|) X:X::X:X X:X::X:X pim (dense-mode|sparse-mode)
```



---

## debug pim bfd

### Netconf RPC payload

```
<ipi-pim-debug_pim-terminal-debug-bfd-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim"/>
```

### Command Syntax

```
debug pim bfd
```

---

## no debug pim bfd

### Netconf RPC payload

```
<ipi-pim-debug_pim-terminal-debug-bfd-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim"/>
```

### Command Syntax

```
no debug pim bfd
```

---

## debug ipv6 pim (vrf NAME|) (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace)

### Netconf RPC payload

```
<ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-on>
```

### Command Syntax

```
debug ipv6 pim (vrf NAME|) (all|events|packet|packet in|packet
out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer
hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune
ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr
bst|timer bsr crp|mib|nsm|nexthop|mtrace)
```

---

---

**no debug ipv6 pim (vrf NAME|) (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace)**

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet|packet in|packet out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr bst|timer bsr crp|mib|nsm|nexthop|mtrace)

### Netconf RPC payload

```
<ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-off>
```

### Command Syntax

```
no debug ipv6 pim (vrf NAME|) (all|events|packet|packet in|packet
out|state|mfc|timer|timer hello|timer bsr|timer joinprune|timer hello ht|timer
hello nlt|timer hello tht|timer joinprune jt|timer joinprune et|timer joinprune
ppt|timer joinprune kat|timer joinprune ot|timer assert|timer register|timer bsr
bst|timer bsr crp|mib|nsm|nexthop|mtrace)
```

---

## debug ipv6 pim (vrf NAME|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

### Netconf RPC payload

```
<ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-all-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
</ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-all-on>
```

### Command Syntax

```
debug ipv6 pim (vrf NAME|)
```

---

## no debug ipv6 pim (vrf NAME|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

### Netconf RPC payload

```
<ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-all-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-pim">
  <vrf-name>NAME</vrf-name>
</ipi-pim-ipv6-debug_pim-ipv6-terminal-debug-all-off>
```

### Command Syntax

```
no debug ipv6 pim (vrf NAME|)
```

---

## IPI-VXLAN

---

### Configure mac address

Use this attribute to set the mac address with arp-nd refresh-timer

Attribute Name: mac-address

Attribute Type: string

Attribute Name: arp-nd-refresh-timer

Attribute Type: uint32

Attribute Range: 3-21600

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <global>
    <config>
      <arp-nd-refresh-timer>3</arp-nd-refresh-timer> <!-- operation="delete"-->
      <mac-address>XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</mac-address>
<!-- operation="delete"-->
    </config>
  </global>
</vxlan>
```

### Command Syntax

```
nvo vxlan arp-nd refresh-timer <3-21600> mac (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX)
```

---

### Configure enable vxlan

Use this attribute to enable VxLAN module. Without this attribute vxlan functionality can not be achieved

Attribute Name: enable-vxlan

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
```

```
<global>
<config>
  </enable-vxlan>
</config>
</global>
</vxlan>
```

### Command Syntax

```
nvo vxlan enable
```

---

## Configure vtep ipv4

Use this attribute to set source vtep global ip address. This will be treated at vxlan tunnel source address

Attribute Name: vtep-ipv4

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
<global>
<config>
  <vtep-ipv4>A.B.C.D</vtep-ipv4> <!-- operation="delete"-->
</config>
</global>
</vxlan>
```

### Command Syntax

```
nvo vxlan vtep-ip-global A.B.C.D
```

---

## Configure mac ageing timer

Use this attribute to set the time till a learned mac address will persist after last update

Attribute Name: mac-ageing-timer

Attribute Type: uint32

Default Value: 300

Attribute Range: 10-1000000

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
<global>
<config>
  <mac-ageing-timer>10</mac-ageing-timer> <!-- operation="delete"-->
</config>
</global>
</vxlan>
```

### Command Syntax

```
nvo vxlan mac-ageing-time <10-1000000>
```

---

## Configure arp nd refresh timer

Use this attribute to configure aging out the arp-cache and nd-cache entries for given time multiplied by 3 in secs.

Attribute Name: arp-nd-refresh-timer

Attribute Type: uint32

Attribute Range: 3-21600

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <global>
    <config>
      <arp-nd-refresh-timer>3</arp-nd-refresh-timer> <!-- operation="delete"-->
    </config>
  </global>
</vxlan>
```

### Command Syntax

```
nvo vxlan arp-nd refresh-timer <3-21600>
```

---

## Configure maximum cache disable count

Use this command to configure the maximum number of ARP and ND cache disables on access ports configured with the port+VLAN options. This command does not limit the ARP and ND cache disables on access ports created with only the port option.

Attribute Name: maximum-cache-disable-count

Attribute Type: uint16

Attribute Range: 1-2500

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <global>
    <config>
      <maximum-cache-disable-count>1</maximum-cache-disable-count> <!--
operation="delete"-->
    </config>
  </global>
</vxlan>
```

### Command Syntax

```
nvo vxlan max-cache-disable <1-2500>
```

---

## Configure disable arp storm control for cpu

Use this attribute to set the vxlan disable arp storm control for cpu

Attribute Name: disable-arp-storm-control-for-cpu

Attribute Type: empty

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <global>
    <config>
      </disable-arp-storm-control-for-cpu><!-- operation="delete"-->
    </config>
  </global>
</vxlan>
```

**Command Syntax**

```
nvo vxlan disable-arp-storm-control-for-cpu
```

---

**Configure mh mac relocate scan**

Use this attribute to set the vxlan mh mac relocate scan

Attribute Name: mh-mac-relocate-scan

Attribute Type: enum (enable|disable)

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <global>
    <config>
      <mh-mac-relocate-scan>enable</mh-mac-relocate-scan> <!-- operation="delete"-->
    </config>
  </global>
</vxlan>
```

**Command Syntax**

```
nvo vxlan mh-mac-relocate-scan (enable|disable)
```

---

**Configure traffic direction**

Use this attribute to set global direction(ingress/egress) for VxLAN. Ingress means traffic coming to network side and egress means traffic going out from network side

This command is supported when following feature are enabled QOS feature

Attribute Name: traffic-direction

Attribute Type: enum (ingress|egress)

Attribute Name: profile-name

Attribute Type: string

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <qos-tunnel-mappings>
    <qos-tunnel-mapping> <!-- operation="delete"-->
      <traffic-direction>ingress</traffic-direction>
    </qos-tunnel-mapping>
  </qos-tunnel-mappings>
  <config>
    <traffic-direction>ingress</traffic-direction>
  </config>
</vxlan>
```

```

    <qos-map-mode>cos-dscp</qos-map-mode>
    <profile-name>NAME</profile-name>
  </config>
  <qos-map-mode>cos-dscp</qos-map-mode>
</qos-tunnel-mapping>
</qos-tunnel-mappings>
</vxlan>

```

## Command Syntax

```
nvo vxlan tunnel qos-map-mode (cos-dscp) (ingress|egress) NAME
```

---

## Configure tenant type

Use this attribute to create tenant with multicast tunnel

Attribute Name: tenant-type

Attribute Type: enum (default|multicast|ingress-replication|ingress-replication inner-vid-disabled)

Attribute Name: etree-leaf

Attribute Type: uint8

## Netconf edit-config payload

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
        </etree-leaf>
      </config>
      <tenant-type>default</tenant-type>
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>

```

## Command Syntax

```
nvo vxlan id <1-16777215> ((default|multicast|ingress-replication|ingress-
  replication inner-vid-disabled)|) (etree-leaf|)
```

---

## Configure bridge vlan id

Use this attribute to create tenant with ingress-replication bridge-vlan tunnel

Attribute Name: bridge-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: tenant-type-bridge

Attribute Type: enum (default|multicast|ingress-replication)

---

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
        <tenant-type-bridge>default</tenant-type-bridge>
      </config>
      <bridge-vlan-id>1</bridge-vlan-id>
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>
```

**Command Syntax**

```
nvo vxlan id <1-16777215> (default|multicast|ingress-replication) (bridge-vlan <1-4094>|)
```

---

**Configure vrf name**

Use this attribute to map VRF to carry EVPN routes. This defines BGP as the mechanism for host reachability advertisement.

Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
      </config>
      <vrf-name>NAME</vrf-name> <!-- operation="delete"-->
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>
```

**Command Syntax**

```
vxlan host-reachability-protocol evpn-bgp NAME
```

---

**Configure map network**

Use this attribute to map a tunnel to the tenant

Attribute Name: map-network

Attribute Type: string



**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
      </config>
      <map-network>NAME</map-network> <!-- operation="delete"-->
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>

```

**Command Syntax**

```
vxlan map-network tunnel NAME
```

---

**Configure mac hold timer**

Use this attribute to set the time a host mac entry will persist after unconfiguring. Hold time range -1 to 300 in seconds. -1(never expire)

Attribute Name: mac-hold-timer

Attribute Type: int32

Default Value: 0

Attribute Range: -1-300

**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
        <mac-hold-timer>-1</mac-hold-timer> <!-- operation="delete"-->
      </config>
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>

```

**Command Syntax**

```
mac-holdtime <-1-300>
```

---

**Configure tenant description**

Use this attribute to set VxLAN identifier name

Attribute Name: tenant-description

Attribute Type: string

Attribute Range: 1-10

**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
      </config>
      <tenant-description>WORD</tenant-description> <!-- operation="delete"-->
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>

```

**Command Syntax**

```
vni-name WORD
```

---

**Configure irb name**

Use this attribute to to configure default gateway behavior on a VTEP for particular VNID.

Attribute Name: irb-name

Attribute Type: string

**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
      </config>
      <irb-name>NAME</irb-name> <!-- operation="delete"-->
    </vxlan-tenant>
  </vxlan-tenants>
</vxlan>

```

**Command Syntax**

```
evpn NAME
```

---

**Configure disable I3 termination**

Use this attribute to set the disable I3 termination

Attribute Name: disable-I3-termination

Attribute Type: string

**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>

```

```

    <vxlan-identifier>1</vxlan-identifier>
  </config>
  <vxlan-identifier>1</vxlan-identifier>
</config>
<disable-l3-termination>XXXX.XXXX.XXXX</disable-l3-termination> <!--
operation="delete"-->
</vxlan-tenant>
</vxlan-tenants>
</vxlan>

```

### Command Syntax

```
disable-l3-termination XXXX.XXXX.XXXX
```

---

## Configure irb advertise host route

Use this attribute to set advertise host to route

Attribute Name: irb-advertise-host-route

Attribute Type: empty

### Netconf edit-config payload

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
      </config>
    </vxlan-tenant>
  </vxlan-tenants>
  <irb>
    <config>
      </irb-advertise-host-route><!-- operation="delete"-->
    </config>
  </irb>
</vxlan>

```

### Command Syntax

```
evpn irb-advertise-host-route
```

---

## Configure vxlan identifier

Use this attribute to know MAC address of the host.create a static route to reach a destination MAC in the VXLAN forwarding table. This command helps to supports different tenants so that they can have the same MAC/IP, but different VNIDs.This command is required for unicast tunnels to map the remote VTEP

Attribute Name: mac-address

Attribute Type: string

Attribute Name: remote-vtep-ipv4

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-tenants>
    <vxlan-tenant>
      <vxlan-identifier>1</vxlan-identifier>
      <config>
        <vxlan-identifier>1</vxlan-identifier>
      </config>
    </vxlan-tenant>
  </vxlan-tenants>
  <static-tenant> <!-- operation="delete"-->
    <mac-address>XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</mac-address>
    <config>
      <mac-address>CML_MAC_ADDR_T</mac-address>
      <remote-vtep-ipv4>A.B.C.D</remote-vtep-ipv4>
    </config>
  </static-tenant>
</vxlan>

```

**Command Syntax**

```

vxlan static-entry host-mac (XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX)
remote-vtep-ip A.B.C.D

```

---

**Configure untagged interface name**

Use this attribute to map a physical interface to identify the tenant traffic and to enter NVO access interface mode

Attribute Name: untagged-interface-name

Attribute Type: string

**Netconf edit-config payload**

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface> <!-- operation="delete"-->
      <untagged-interface-name>WORD</untagged-interface-name>
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>

```

**Command Syntax**

```

nvo vxlan access-if port IFNAME

```

---

**Configure default access interface**

Use this attribute to create default access interface

Attribute Name: default-access-interface

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>
```

### Command Syntax

```
nvo vxlan access-if port IFNAME default
```

---

## Configure admin shutdown

Use this attribute to shutdown vxlan access interface

This command is supported when following feature are disabled DNX feature

Attribute Name: admin-shutdown

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
      </admin-shutdown><!-- operation="delete"-->
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>
```

### Command Syntax

```
shutdown
```

---

## Configure description

Use this attribute to set description of access interface

This command is supported when following feature are disabled DNX feature

Attribute Name: description

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
      <description>LINE</description> <!-- operation="delete"-->
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>
```

### Command Syntax

```
description LINE
```

---

## Configure dynamic learning disable

Use this attribute to disable dynamic learning of MACs at the access port. This command also disables dynamic learning of MAC/IP from ARP/ND messages received on this access port.

This command is supported when following feature are disabled DNX feature

Attribute Name: dynamic-learning-disable

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
      </dynamic-learning-disable><!-- operation="delete"-->
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>
```

### Command Syntax

```
dynamic-learning disable
```

---

## Configure access mac hold time

Use this attribute to set the time a host mac entry will persist after unconfiguring. The feature holds the MAC in hardware until BGP has withdrawn from the neighbors. This helps to reduce flooding to other access ports. This setting applies when the access port is shut down, the physical port on which the access port is down, or the access port is

removed from the VNID using the no form of the map vnid command. When the MAC hold time is configured as -1, then the MAC is not removed from the hardware and is also not withdrawn from EVPN BGP

This command is supported when following feature are disabled DNX feature

Attribute Name: access-mac-hold-time

Attribute Type: int32

Attribute Range: -1-300

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
      <access-mac-hold-time>-1</access-mac-hold-time> <!-- operation="delete"-->
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>
```

### Command Syntax

```
mac-holdtime <-1-300>
```

---

## Configure arp nd flood suppress

Use this attribute to restrict the flood of ARP/ND packets towards remote VTEPs or other access ports. This command applies only when the ARP cache and ND cache are enabled. When the ARP cache is disabled, ARP flooding is not suppressed even if this command is given. When the ND cache is disabled, ND flooding is not disabled, even if this command is given

This command is supported when following feature are disabled DNX feature

Attribute Name: arp-nd-flood-suppress

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
      <arp-nd-flood-suppress><!-- operation="delete"-->
    </untagged-access-interface>
  </untagged-access-interfaces>
</vxlan>
```

## Command Syntax

```
arp-nd flood-suppress
```

---

## Configure garp gna enable

Use this attribute to allow garp-gna packets advertisement

This command is supported when following feature are disabled DNX feature

Attribute Name: garp-gna-enable

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
    </garp-gna-enable><!-- operation="delete"-->
  </untagged-access-interface>
</untagged-access-interfaces>
</vxlan>
```

## Command Syntax

```
garp-gna enable
```

---

## Configure arp cache disable

Use this attribute to disable the ARP cache for MAC/IP. When the ARP cache is disabled on a VxLAN access port, ZebOS-XP does not reply to any ARP arriving on this port from the cache. ZebOS-XP withdraws all MAC/IPs configured/learned on this access port and removes the MAC/IP entry for this access port from the local ARP cache. ZebOS-XP also makes sure that on withdrawing the MAC/IP route, the MAC does not become unknown. If all routes for this MAC are being withdrawn because of this command, then ZebOS-XP advertises a MAC-only route. This is done so that the MAC does not become unknown and only the cache functionality becomes disabled. See also `nvo vxlan max-cache-disable`. Use the `no` form of this command to enable ARP cache for MAC/IP. Note: On enabling the cache, an IP will be in conflict, then the cache enable will fail. The conflict has to be manually removed and then the cache enabled.

This command is supported when following feature are disabled DNX feature

Attribute Name: arp-cache-disable

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
    <config>
```



```

        <untagged-interface-name>WORD</untagged-interface-name>
    </config>
<cache>
<config>
    </arp-cache-disable><!-- operation="delete"-->
</config>
</cache>
</untagged-access-interface>
</untagged-access-interfaces>
</vxlan>

```

## Command Syntax

```
arp-cache disable
```

## Configure nd cache disable

Use this attribute to disable ND cache for MAC/IPv6. When the ARP cache is disabled on a VxLAN access port, ZebOS-XP does not reply to any ARP arriving on this port from the cache. ZebOS-XP withdraws all MAC/IPs configured/learned on this access port and removes the MAC/IP entry for this access port from the local ARP cache. ZebOS-XP also makes sure that on withdrawing the MAC/IP route, the MAC does not become unknown. If all routes for this MAC are being withdrawn because of this command, then ZebOS-XP advertises a MAC-only route. This is done so that the MAC does not become unknown and only the cache functionality becomes disabled. Use the no form of this command to enable ND cache for MAC/IPv6. Note: On enabling the cache, an IP will be in conflict, then the cache enable will fail. The conflict has to be manually removed and then the cache enabled.

This command is supported when following feature are disabled DNX feature

Attribute Name: nd-cache-disable

Attribute Type: empty

## Netconf edit-config payload

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
    </untagged-access-interface>
  </untagged-access-interfaces>
  <cache>
    <config>
      </nd-cache-disable><!-- operation="delete"-->
    </config>
  </cache>
</vxlan>

```

## Command Syntax

```
nd-cache disable
```

---

## Configure ipv4 address

Use this attribute to know MAC address of the host

Attribute Name: mac-address

Attribute Type: string

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
    </untagged-access-interface>
  </untagged-access-interfaces>
  <host-macs-ipv4>
    <host-mac-ipv4> <!-- operation="delete"-->
      <ipv4-address>A.B.C.D</ipv4-address>
      <config>
        <ipv4-address>A.B.C.D</ipv4-address>
        <mac-address>CML_MAC_ADDR_T</mac-address>
      </config>
      <mac-address>CML_MAC_ADDR_T</mac-address>
    </host-mac-ipv4>
  </host-macs-ipv4>
</vxlan>
```

### Command Syntax

```
mac (XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) ip IP-ADDRESS
```

---

## Configure ipv6 address

Use this attribute to know MAC address of the host

Attribute Name: mac-address

Attribute Type: string

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
      <config>
        <untagged-interface-name>WORD</untagged-interface-name>
      </config>
    </untagged-access-interface>
  </untagged-access-interfaces>
  <host-macs-ipv6>
    <host-mac-ipv6> <!-- operation="delete"-->
      <ipv6-address>X:X::X:X</ipv6-address>
    </host-mac-ipv6>
  </host-macs-ipv6>
</vxlan>
```

```

<config>
  <ipv6-address>IP-ADDRESS</ipv6-address>
  <mac-address>XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</mac-address>
</config>
  <mac-address>CML_MAC_ADDR_T</mac-address>
</host-mac-ipv6>
</host-macs-ipv6>
</untagged-access-interface>
</untagged-access-interfaces>
</vxlan>

```

## Command Syntax

```
mac (XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) ipv6 IP-ADDRESS
```

## Configure profile map type

Use this attribute to map the profile type for which qos profile is already created globally to access port

This command is supported when following feature are enabled QOS feature and following feature are disabled DNX feature

Attribute Name: profile-map-type

Attribute Type: enum (cos-to-queue|queue-color-to-cos)

Attribute Name: profile-name

Attribute Type: string

## Netconf edit-config payload

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <untagged-access-interfaces>
    <untagged-access-interface>
      <untagged-interface-name>WORD</untagged-interface-name>
    <config>
      <untagged-interface-name>WORD</untagged-interface-name>
    </config>
  <access-interface-qos-type-mappings>
    <access-interface-qos-type-mapping> <!-- operation="delete"-->
      <profile-map-type>cos-to-queue</profile-map-type>
    <config>
      <profile-map-type>cos-to-queue</profile-map-type>
      <profile-name>NAME</profile-name>
    </config>
  </access-interface-qos-type-mapping>
</access-interface-qos-type-mappings>
</untagged-access-interface>
</untagged-access-interfaces>
</vxlan>

```

## Command Syntax

```
map qos-profile (cos-to-queue|queue-color-to-cos) NAME
```

## Configure vlan identifier

Use this attribute to map a VLAN on physical interface to identify the tenant traffic and to enter NVO access interface mode

This command is supported when following feature are disabled DNX feature

Attribute Name: vlan-identifier

Attribute Type: string

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <tagged-access-interfaces>
    <tagged-access-interface> <!-- operation="delete"-->
      <vlan-identifier>VLAN_RANGE</vlan-identifier>
      <config>
        <vlan-identifier>VLAN_RANGE</vlan-identifier>
        <interface-name>WORD</interface-name>
      </config>
    </tagged-access-interface>
  </tagged-access-interfaces>
</vxlan>
```

### Command Syntax

```
nvo vxlan access-if port-vlan IFNAME VLAN_RANGE
```

## Configure tag protocol identifier

Use this attribute to set the Tpid for the outer vlan. Ox88A8: IEEE 802.1ad Provider Bridging and Ox9100: IEEE 802.1Q VLAN-tagged frame with double tagging

This command is supported when following feature are disabled DNX feature

Attribute Name: tag-protocol-identifier

Attribute Type: string

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <tagged-access-interfaces>
    <tagged-access-interface>
      <vlan-identifier>VLAN_RANGE</vlan-identifier>
      <config>
        <vlan-identifier>VLAN_RANGE</vlan-identifier>
        <interface-name>WORD</interface-name>
      </config>
      <interface-name>WORD</interface-name>
      <tag-protocol-identifier>TPID</tag-protocol-identifier> <!-- operation="delete"-->
    </tagged-access-interface>
  </tagged-access-interfaces>
</vxlan>
```

## Command Syntax

encapsulation TPID

---

## Configure interface name

Use this attribute to shutdown vxlan access interface

This command is supported when following feature are disabled DNX feature

Attribute Name: admin-shutdown

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <tagged-access-interfaces>
    <tagged-access-interface>
      <vlan-identifier>VLAN_RANGE</vlan-identifier>
      <config>
        <vlan-identifier>VLAN_RANGE</vlan-identifier>
        <interface-name>WORD</interface-name>
      </config>
      <interface-name>WORD</interface-name>
      </admin-shutdown><!-- operation="delete"-->
    </tagged-access-interface>
  </tagged-access-interfaces>
</vxlan>
```

## Command Syntax

shutdown

---

## Configure profile name

Use this attribute to map the profile type for which qos profile is already created globally to access port

This command is supported when following feature are enabled QOS feature and following feature are disabled DNX feature

Attribute Name: profile-map-type

Attribute Type: enum (cos-to-queue|queue-color-to-cos)

Attribute Name: profile-name

Attribute Type: string

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <tagged-access-interfaces>
    <tagged-access-interface>
      <vlan-identifier>VLAN_RANGE</vlan-identifier>
      <config>
        <vlan-identifier>VLAN_RANGE</vlan-identifier>
        <interface-name>WORD</interface-name>
      </config>
    </tagged-access-interface>
  </tagged-access-interfaces>
</vxlan>
```

```

    </config>
    <interface-name>WORD</interface-name>
  <access-interface-qos-type-mappings>
  <access-interface-qos-type-mapping> <!-- operation="delete"-->
    <profile-map-type>cos-to-queue</profile-map-type>
    <config>
      <profile-map-type>cos-to-queue</profile-map-type>
      <profile-name>NAME</profile-name>
    </config>
  </access-interface-qos-type-mapping>
</access-interface-qos-type-mappings>
</tagged-access-interface>
</tagged-access-interfaces>
</vxlan>

```

## Command Syntax

```
map qos-profile (cos-to-queue|queue-color-to-cos) NAME
```

---

## Configure inner vlan identifier

Use this attribute to map VLAN'S on an interface to identify the tenant traffic and to enter NVO access interface mode

This command is supported when following feature are disabled DNX feature

Attribute Name: inner-vlan-identifier

Attribute Type: uint32

Attribute Range: 2-4094

## Netconf edit-config payload

```

<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <double-tagged-access-interfaces>
  <double-tagged-access-interface> <!-- operation="delete"-->
    <inner-vlan-identifier>2</inner-vlan-identifier>
    <config>
      <inner-vlan-identifier>2</inner-vlan-identifier>
      <vlan-identifier>VLAN_RANGE</vlan-identifier>
      <interface-name>WORD</interface-name>
    </config>
    <vlan-identifier>VLAN_RANGE</vlan-identifier>
    <interface-name>WORD</interface-name>
  </double-tagged-access-interface>
</double-tagged-access-interfaces>
</vxlan>

```

## Command Syntax

```
nvo vxlan access-if port-vlan IFNAME VLAN_RANGE inner-vlan <2-4094>
```

---

## Configure access if

VXLAN logical access port per physical interface

Attribute Name: access-if

Attribute Type: empty

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </access-if><!-- operation="delete"-->
    </interface>
  </interfaces>
</vxlan>
```

### Command Syntax

```
access-if-vxlan
```

---

## Configure evpn mac holdtime

Use this attribute to set the evpn mac hold time

Attribute Name: evpn-mac-holdtime

Attribute Type: uint32

Attribute Range: 1-600

### Netconf edit-config payload

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <evpn-mac-holdtime>1</evpn-mac-holdtime> <!-- operation="delete"-->
    </interface>
  </interfaces>
</vxlan>
```

### Command Syntax

```
evpn-mac-holdtime <1-600>
```

---

## Configure arp cache

Use this attribute to set the ARP cache in interface

Attribute Name: arp-cache

Attribute Type: empty

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </arp-cache><!-- operation="delete"-->
    </interface>
  </interfaces>
</vxlan>
```

**Command Syntax**

```
arp-cache disable
```

---

**Configure nd cache**

Use this attribute to set the ND cache in interface

Attribute Name: nd-cache

Attribute Type: empty

**Netconf edit-config payload**

```
<vxlan xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </nd-cache><!-- operation="delete"-->
    </interface>
  </interfaces>
</vxlan>
```

**Command Syntax**

```
nd-cache disable
```

---

**clear mac address-table dynamic vxlan****Netconf RPC payload**

```
<clear-nvo-vxlan-dynamic-mac-address-table xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-vxlan"/>
```

**Command Syntax**

```
clear mac address-table dynamic vxlan
```



---

## clear mac address-table dynamic vxlan vnid <1-16777215> (address MACADDR|)

Attribute Name: vxlan-identifier

Attribute Type: uint32

Attribute Range: 1-16777215

Attribute Name: mac-address

Attribute Type: string

### Netconf RPC payload

```
<clear-nvo-vxlan-dynamic-mac-address-table-vnid xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <vxlan-identifier>1</vxlan-identifier>
  <mac-address>MACADDR</mac-address>
</clear-nvo-vxlan-dynamic-mac-address-table-vnid>
```

### Command Syntax

```
clear mac address-table dynamic vxlan vnid <1-16777215> (address MACADDR|)
```

---

## clear nvo vxlan tunnels

### Netconf RPC payload

```
<clear-nvo-vxlan-tunnels xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan"/>
```

### Command Syntax

```
clear nvo vxlan tunnels
```

---

## clear nvo vxlan tunnels dst-ip A.B.C.D

Attribute Name: destination-vtep-ip

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<clear-nvo-id-vxlan-tunnels-destip xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-vxlan">
  <destination-vtep-ip>A.B.C.D</destination-vtep-ip>
</clear-nvo-id-vxlan-tunnels-destip>
```

### Command Syntax

```
clear nvo vxlan tunnels dst-ip A.B.C.D
```

---

## clear nvo vxlan mac-stale-entries (vnid <1-16777215>|)

Attribute Name: vxlan-identifier

Attribute Type: uint32

Attribute Range: 1-16777215

### Netconf RPC payload

```
<clear-nvo-vxlan-mac-stale-entries xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-vxlan">
  <vxlan-identifier>1</vxlan-identifier>
</clear-nvo-vxlan-mac-stale-entries>
```

### Command Syntax

```
clear nvo vxlan mac-stale-entries (vnid <1-16777215>|)
```

---

## clear nvo vxlan counters access-port port IFNAME

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<clear-vxlan-untagged-access-port-counters xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-vxlan">
  <interface-name>IFNAME</interface-name>
</clear-vxlan-untagged-access-port-counters>
```

### Command Syntax

```
clear nvo vxlan counters access-port port IFNAME
```

---

## clear nvo vxlan counters access-port port-vlan IFNAME VLAN\_RANGE

Attribute Name: interface-name

Attribute Type: string

Attribute Name: vlan-identifier

Attribute Type: string

### Netconf RPC payload

```
<clear-vxlan-single-tagged-access-port-counters xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <interface-name>IFNAME</interface-name>
  <vlan-identifier>VLAN_RANGE</vlan-identifier>
</clear-vxlan-single-tagged-access-port-counters>
```

### Command Syntax

```
clear nvo vxlan counters access-port port-vlan IFNAME VLAN_RANGE
```

---

## clear nvo vxlan counters access-port port-vlan IFNAME outer-vlan <2-4094> inner-vlan <2-4094>

Attribute Name: interface-name

Attribute Type: string

Attribute Name: outer-vlan-identifier

Attribute Type: uint32

Attribute Range: 2-4094

Attribute Name: inner-vlan-identifier

Attribute Type: uint32

Attribute Range: 2-4094

### Netconf RPC payload

```
<clear-vxlan-double-tagged-access-port-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <interface-name>IFNAME</interface-name>
  <outer-vlan-identifier>outer-vlan</outer-vlan-identifier>
  <inner-vlan-identifier>inner-vlan</inner-vlan-identifier>
</clear-vxlan-double-tagged-access-port-counters>
```

### Command Syntax

```
clear nvo vxlan counters access-port port-vlan IFNAME outer-vlan <2-4094> inner-
vlan <2-4094>
```

---

## clear nvo vxlan counters access-port all

### Netconf RPC payload

```
<clear-vxlan-access-port-counters-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan"/>
```

### Command Syntax

```
clear nvo vxlan counters access-port all
```

---

## clear nvo vxlan counters network-port dst A.B.C.D

Attribute Name: destination-vtep-ip

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<clear-vxlan-network-port-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan">
  <destination-vtep-ip>A.B.C.D</destination-vtep-ip>
</clear-vxlan-network-port-counters>
```

### Command Syntax

```
clear nvo vxlan counters network-port dst A.B.C.D
```

---

## clear nvo vxlan counters network-port all

### Netconf RPC payload

```
<clear-vxlan-network-port-counters-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-vxlan"/>
```

### Command Syntax

```
clear nvo vxlan counters network-port all
```

---

## IPI-ETHERNET-VPN

---

### Configure esi hold time

Use this attribute to set time before ESI can be made up on enabling evpn

Attribute Name: esi-hold-time

Attribute Type: uint32

Attribute Range: 10-300

### Netconf edit-config payload

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <multi-homing>
    <config>
      <esi-hold-time>10</esi-hold-time> <!-- operation="delete"-->
    </config>
  </multi-homing>
</evpn>
```

### Command Syntax

```
evpn esi hold-time <10-300>
```

---

## Configure enable vxlan multihoming

Use this attribute to enable multihoming module on vxlan. Without this attribute multihomig functionality can not be achieved

Attribute Name: enable-vxlan-multihoming

Attribute Type: uint8

### Netconf edit-config payload

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <global>
    <config>
      </enable-vxlan-multihoming><!-- operation="delete"-->
    </config>
  </global>
</evpn>
```

---

## Command Syntax

```
evpn multihoming enable
```

---

## Configure enable irb

Use this attribute to enable integrated routing and bridging module. Without this attribute IRB functionality can not be achieved

Attribute Name: enable-irb

Attribute Type: empty

### Netconf edit-config payload

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <global>
    <config>
      </enable-irb><!-- operation="delete"-->
    </config>
  </global>
</evpn>
```

## Command Syntax

```
nvo vxlan irb
```

---

## Configure enable evpn etree

Use this attribute to enable evpn etree module on evpn mpls or vxlan.

Attribute Name: enable-evpn-etree

Attribute Type: empty

### Netconf edit-config payload

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <global>
    <config>
      </enable-evpn-etree><!-- operation="delete"-->
    </config>
  </global>
</evpn>
```

## Command Syntax

```
evpn etree enable
```

---

## Configure mac address

Use this attribute to configure common anycast mac-address for all IRB interfaces

Attribute Name: mac-address

Attribute Type: string

---

**Netconf edit-config payload**

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <irb-forwarding>
    <config>
      <mac-address>XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</mac-address>
<!-- operation="delete"-->
    </config>
  </irb-forwarding>
</evpn>
```

**Command Syntax**

```
evpn irb-forwarding anycast-gateway-mac (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX)
```

---

**Configure gateway mac**

Use this attribute to configure anycast mac-address for an IRB interface

Attribute Name: gateway-mac

Attribute Type: empty

**Netconf edit-config payload**

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <irb-forwarding>
    <irb-interfaces>
      <irb-interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </gateway-mac><!-- operation="delete"-->
      </irb-interface>
    </irb-interfaces>
  </irb-forwarding>
</evpn>
```

**Command Syntax**

```
evpn irb-if-forwarding anycast-gateway-mac
```

---

**Configure name**

Reference to interface name

Attribute Name: name

Attribute Type: string

Attribute Name: evpn-segment-id

Attribute Type: string

**Netconf edit-config payload**

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
<interfaces>
<interface> <!-- operation="delete"-->
  <name>WORD</name>
  <config>
    <name>WORD</name>
    <evpn-segment-id>XX:XX:XX:XX:XX:XX:XX:XX</evpn-segment-id>
  </config>
</interface>
</interfaces>
</evpn>
```

**Command Syntax**

```
evpn multi-homed esi XX:XX:XX:XX:XX:XX:XX:XX
```

---

**Configure system mac**

Reference to interface name

Attribute Name: name

Attribute Type: string

Attribute Name: system-mac

Attribute Type: string

**Netconf edit-config payload**

```
<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
<interfaces>
<interface> <!-- operation="delete"-->
  <name>WORD</name>
  <config>
    <name>WORD</name>
    <system-mac>XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</system-mac>
  </config>
</interface>
</interfaces>
</evpn>
```

**Command Syntax**

```
evpn multi-homed system-mac (XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX)
```

---

**Configure service type**

Use this attribute to configure Vlan-Based EVPN-Service Type

Attribute Name: service-type

Attribute Type: enum (vlan-based|vlan-aware-bundle)

**Netconf edit-config payload**

```

<evpn xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ethernet-vpn">
  <vrfs>
    <vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
      </config>
      <service-type>vlan-based</service-type> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</evpn>

```

**Command Syntax**

```
evpn-vlan-service (vlan-based|vlan-aware-bundle)
```

---

**IPI-TFO**

---

**Configure admin status**

Use this attribute to enable or disable trigger failover (TFO).TFO can be enabled only if the bridge mode is STP or RSTP.

Attribute Name: admin-status

Attribute Type: enum (disable|enable)

**Netconf edit-config payload**

```

<trigger-failover xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo">
  <config>
    <admin-status>disable</admin-status> <!-- operation="delete"-->
  </config>
</trigger-failover>

```

**Command Syntax**

```
tfo (disable|enable)
```

---

**Configure link type**

Use this attribute to make a port an uplink or downlink.

Attribute Name: link-type

Attribute Type: enum (uplink|downlink)

**Netconf edit-config payload**

```

<trigger-failover xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo">
  <interfaces>
    <interface>
      <name>IFNAME</name>

```



```

    <config>
      <name>WORD</name>
    </config>
    <link-type>uplink</link-type> <!-- operation="delete"-->
  </interface>
</interfaces>
</trigger-failover>

```

### Command Syntax

```
link-type (uplink|downlink)
```

---

## Configure fog id

Use this attribute to Create or delete a failover group (FOG) on interface.

Attribute Name: fog-id

Attribute Type: uint32

Attribute Range: 1-64

Attribute Name: group-type

Attribute Type: enum (mpg|cpg)

### Netconf edit-config payload

```

<trigger-failover xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo">
  <interfaces>
    <interface>
      <name>IFNAME</name>
      <config>
        <name>WORD</name>
      </config>
    <tfo-groups>
      <tfo-group> <!-- operation="delete"-->
        <fog-id>1</fog-id>
        <config>
          <fog-id>1</fog-id>
          <group-type>mpg</group-type>
        </config>
      </tfo-group>
    </tfo-groups>
  </interface>
</interfaces>
</trigger-failover>

```

### Command Syntax

```
fog <1-64> type (mpg|cpg)
```

---

## Configure group id

Use this attribute to Create or delete a failover group (FOG).

Attribute Name: group-id

Attribute Type: uint32

Attribute Range: 1-64

Attribute Name: admin-status

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<trigger-failover xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo">
  <failover-groups>
    <failover-group> <!-- operation="delete"-->
      <group-id>1</group-id>
      <config>
        <group-id>1</group-id>
        <admin-status>disable</admin-status>
      </config>
    </failover-group>
  </failover-groups>
</trigger-failover>
```

### Command Syntax

```
fog <1-64> (disable|enable)
```

---

## Configure failover trigger count

Use this attribute to set the number of links to trigger failover for a Monitor Port Groups (MPG).

Attribute Name: failover-trigger-count

Attribute Type: uint32

Attribute Range: 0-63

### Netconf edit-config payload

```
<trigger-failover xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo">
  <failover-groups>
    <failover-group>
      <group-id>1</group-id>
      <config>
        <group-id>1</group-id>
      </config>
      <failover-trigger-count>0</failover-trigger-count> <!-- operation="delete"-->
    </failover-group>
  </failover-groups>
</trigger-failover>
```

### Command Syntax

```
fog <1-64> tfc <0-63>
```

---

## clear tfo counter

### Netconf RPC payload

```
<tfo-clear-counters-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo"/>
```

### Command Syntax

```
clear tfo counter
```

---

## clear tfo counter fog <1-64>

Attribute Name: group-id

Attribute Type: uint32

Attribute Range: 1-64

### Netconf RPC payload

```
<tfo-clear-fog-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tfo">
  <group-id>1</group-id>
</tfo-clear-fog-counters>
```

### Command Syntax

```
clear tfo counter fog <1-64>
```

---

## IPI-LOGGING

---

### Configure severity level

Use this attribute to set the severity level that a message for a specific module must reach before the messages is logged. Default value is 2-critical.

Attribute Name: severity-level

Attribute Type: enum (0|1|2|3|4|5|6|7)

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <logging-modules>
    <module-logging>
      <module-name>auth</module-name>
      <config>
        <module-name>auth</module-name>
      </config>
      <severity-level>2</severity-level>
    </module-logging>
  </logging-modules>
</logging>
```

## Command Syntax

```
logging level
(auth|bgp|cmm|hostp|hsl|isis|lag|l2mrib|mstp|mrrib|nsm|onm|oam|ospf|ospf6|rip|pim
|rib|vrrp|sflow|pserv|cml|ndd|ripng|vlog|all|udld) ((0|1|2|3|4|5|6|7)|)
```

---

## Configure enable logging

Use this attribute to set severity level of logging monitor. Default value is 7-debug-details.

Attribute Name: severity-level

Attribute Type: enum (0|1|2|3|4|5|6|7)

Default Value: 7

Attribute Name: enable-logging

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
<monitor-logging>
<config>
  <enable-logging>enable</enable-logging> <!-- operation="delete"-->
  <severity-level>7</severity-level> <!-- operation="delete"-->
</config>
</monitor-logging>
</logging>
```

## Command Syntax

```
logging monitor ((disable)|) ((0|1|2|3|4|5|6|7)|)
```

---

## Configure max file size

Set size of the log file in bytes. Default value is 419430400 bytes.

Attribute Name: max-file-size

Attribute Type: uint32

Attribute Range: 4096-419430400

Attribute Name: file-name

Attribute Type: string

Attribute Name: severity-level

Attribute Type: enum (0|1|2|3|4|5|6|7)

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
<logfile>
<config>
  <file-name>LOGFILENAME</file-name> <!-- operation="delete"-->
  <severity-level>6</severity-level> <!-- operation="delete"-->
  <max-file-size>4096</max-file-size> <!-- operation="delete"-->
</config>
</logfile>
</logging>
```

```

</config>
</logfile>
</logging>

```

## Command Syntax

```
logging logfile LOGFILENAME (0|1|2|3|4|5|6|7) size <4096-419430400>
```

---

## Configure file name

Use this attribute to set name of the logging file.

Attribute Name: file-name

Attribute Type: string

Attribute Name: severity-level

Attribute Type: enum (0|1|2|3|4|5|6|7)

## Netconf edit-config payload

```

<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <logfile>
    <config>
      <severity-level>6</severity-level>
      <file-name>LOGFILENAME</file-name>
    </config>
  </logfile>
</logging>

```

## Command Syntax

```
logging logfile LOGFILENAME (0|1|2|3|4|5|6|7)
```

---

## Configure timestamp granularity

Use this attribute to set the logging timestamp granularity.

This command is supported when following feature are enabled syslog feature

Attribute Name: timestamp-granularity

Attribute Type: enum (none|microseconds|milliseconds|seconds)

Default Value: milliseconds

## Netconf edit-config payload

```

<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <syslog>
    <config>
      <timestamp-granularity>milliseconds</timestamp-granularity> <!--
operation="delete"-->
    </config>
  </syslog>
</logging>

```

## Command Syntax

```
logging timestamp (none|microseconds|milliseconds|seconds|)
```

---

## Configure cli timestamp

Use this attribute to display execution timestamp in show output

This command is supported when following feature are enabled syslog feature

Attribute Name: cli-timestamp

Attribute Type: empty

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <syslog>
    <config>
      </cli-timestamp><!-- operation="delete"-->
    </config>
  </syslog>
</logging>
```

## Command Syntax

```
cli timestamp
```

---

## Configure disable all modules debug

Use this attribute to unset debug globally

Attribute Name: disable-all-modules-debug

Attribute Type: empty

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <global>
    <config>
      </disable-all-modules-debug><!-- operation="delete"-->
    </config>
  </global>
</logging>
```

## Command Syntax

```
no debug all
```

---

## no debug all

### Netconf RPC payload

```
<terminal-debug-all-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging"/>
```

---

## Command Syntax

```
no debug all
```

---

## clear debug logfile

### Netconf RPC payload

```
<logging-clear-debug-logfile xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging"/>
```

### Command Syntax

```
clear debug logfile
```

---

## clear logging logfile

### Netconf RPC payload

```
<logging-clear-logging-logfile xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging"/>
```

### Command Syntax

```
clear logging logfile
```

---

## remove file (techsupport) (all|FILENAME)

Attribute Name: file\_type

Attribute Type: enum (techsupport)

Attribute Name: filename

Attribute Type: union

### Netconf RPC payload

```
<remove-file xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">  
  <file_type>techsupport</file_type>  
  <filename>FILE_TYPE_T</filename>  
</remove-file>
```

### Command Syntax

```
remove file (techsupport) (all|FILENAME)
```

---

## IPI-LOGGING-REMOTE

---

## Configure enable

This attribute enables/disables the logging host debug.

Attribute Name: enable

Attribute Type: empty

---

**Netconf edit-config payload**

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</logging>
```

**Command Syntax**

```
debug logging host
```

---

**Configure enable rsyslog**

Enable/disable the rsyslog feature

Attribute Name: enable-rsyslog

Attribute Type: empty

**Netconf edit-config payload**

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <remote-logging>
    <config>
      </enable-rsyslog><!-- operation="delete"-->
    </config>
  </remote-logging>
</logging>
```

**Command Syntax**

```
feature rsyslog
```

---

**Configure port**

Use this attribute to configure the syslog server UDP port. Default value is 514

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: port

Attribute Type: uint16

Attribute Range: 1024-65535

Attribute Name: severity

Attribute Type: enum (0|1|2|3|4|5|6|7)

**Netconf edit-config payload**

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <remote-logging>
    <remote-servers>
      <remote-server>
        <vrf>NAME</vrf>
      </remote-server>
    </remote-servers>
  </remote-logging>
</logging>
```



```

<config>
  <vrf>NAME</vrf>
</config>
<servers>
<server>
  <address>A.B.C.D</address>
  <config>
    <address>1</address>
    <severity>7</severity> <!-- operation="delete"-->
  </config>
  <port>1024</port> <!-- operation="delete"-->
</server>
</servers>
</remote-server>
</remote-servers>
</remote-logging>
</logging>

```

## Command Syntax

```
logging remote server (A.B.C.D|X:X::X:X|HOSTNAME) ((0|1|2|3|4|5|6|7)|) port <1024-65535> (vrf (NAME|management)|)
```

## Configure severity

This attribute is used to specify the kind of messages by severity level. The default value is debug-detail. The possible values for levels are as follows: [Operator] 0-emerg; 1-alert; 2-critical; 3-error; 4-notify; 5-info [Debug] 3-error; 4-warning; 5-notif; 6-debug-info; 7-debug-detail

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: severity

Attribute Type: enum (0|1|2|3|4|5|6|7)

## Netconf edit-config payload

```

<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
<remote-logging>
<remote-servers>
<remote-server>
  <vrf>NAME</vrf>
  <config>
    <vrf>NAME</vrf>
  </config>
  <servers>
  <server>
    <address>A.B.C.D</address>
    <config>
      <address>1</address>
    </config>
    <severity>7</severity>
  </server>
</servers>

```

```

</remote-server>
</remote-servers>
</remote-logging>
</logging>

```

## Command Syntax

```

logging remote server (A.B.C.D|X:X::X:X|HOSTNAME) ((0|1|2|3|4|5|6|7)|) (vrf
(NAME|management)|)

```

---

## Configure disable default instance

Use this attribute to prevent default rsyslog config from being enabled at start up

Attribute Name: disable-default-instance

Attribute Type: empty

### Netconf edit-config payload

```

<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <remote-logging>
  <default-instance>
  <config>
    </disable-default-instance><!-- operation="delete"-->
  </config>
</default-instance>
</remote-logging>
</logging>

```

## Command Syntax

```

logging remote disable-default

```

---

## Configure remote server facility

This attribute is used to specify the facility level used by syslog messages. The default value is local7. The possible values are local0, local1, local2, local3, local4, local5, local6, local7 and user.

Attribute Name: remote-server-facility

Attribute Type: enum (local0|local1|local2|local3|local4|local5|local6|local7|user)

Default Value: local7

### Netconf edit-config payload

```

<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <global>
  <config>
    <remote-server-facility>local7</remote-server-facility> <!--
operation="delete"-->
  </config>
</global>
</logging>

```

---

## Command Syntax

```
logging remote facility
(local0|local1|local2|local3|local4|local5|local6|local7|user)
```

---

## Configure remote authpriv facility

Enable/disable logging authpriv facility for remote syslog server.

Attribute Name: remote-authpriv-facility

Attribute Type: empty

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <global>
    <config>
      </remote-authpriv-facility><!-- operation="delete"-->
    </config>
  </global>
</logging>
```

## Command Syntax

```
logging remote authpriv
```

---

## IPI-LOGGING-CLI

---

## Configure enable logging

Use this attribute to enable/disable CLI history logs. By default CLI history is enabled.

Attribute Name: enable-logging

Attribute Type: empty

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <cli-logging>
    <config>
      </enable-logging><!-- operation="delete"-->
    </config>
  </cli-logging>
</logging>
```

## Command Syntax

```
logging cli
```

---

## Configure max session limit

Use this attribute to set maximum session limit for vty.

Attribute Name: max-session-limit

Attribute Type: uint8

Attribute Range: 1-40

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <cli-logging>
    <max-session-limit>
      <config>
        <max-session-limit>1</max-session-limit> <!-- operation="delete"-->
      </config>
    </max-session-limit>
  </cli-logging>
</logging>
```

### Command Syntax

```
max-session <1-40>
```

---

## IPI-EVENT-MANAGER

---

### Configure feature

Enable Event Manager

Attribute Name: feature

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<event-manager xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-event-manager">
  <config>
    <feature>disable</feature> <!-- operation="delete"-->
  </config>
</event-manager>
```

### Command Syntax

```
event-manager (disable|enable)
```

---

## Configure event pattern

Pattern to match

Attribute Name: event-pattern

Attribute Type: string

Attribute Name: event-type

Attribute Type: enum (syslog)

Attribute Name: event-id

Attribute Type: string

Attribute Range: 4-128

Attribute Name: severity

Attribute Type: enum (0|1|2|3|4|5|all)

Default Value: all

### Netconf edit-config payload

```

<event-manager xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-event-manager">
  <event-entries>
    <event-entry>
      <event-name>NAME</event-name>
      <config>
        <event-name>WORD</event-name>
        <event-type>syslog</event-type>
        <event-id>EVENT-ID</event-id>
        <severity>all</severity>
      </config>
      <event-pattern>PATTERN</event-pattern>
    </event-entry>
  </event-entries>
</event-manager>

```

### Command Syntax

```

event-manager event NAME type (syslog) EVENT-ID ({ severity (0|1|2|3|4|5|all) |
pattern PATTERN })

```

## Configure action script

Name of script

Attribute Name: action-script

Attribute Type: string

Attribute Range: 4-64

Attribute Name: action-type

Attribute Type: enum (script)

### Netconf edit-config payload

```

<event-manager xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-event-manager">
  <action-entries>
    <action-entry>
      <action-name>NAME</action-name>
      <config>
        <action-name>WORD</action-name>
        <action-type>script</action-type>
      </config>
      <action-script>SCRIPT</action-script>
    </action-entry>
  </action-entries>
</event-manager>

```

```
</action-entries>
</event-manager>
```

## Command Syntax

```
event-manager action NAME type (script) SCRIPT
```

---

## Configure action name

Name of action

Attribute Name: action-name

Attribute Type: string

Attribute Range: 2-32

Attribute Name: event-name

Attribute Type: string

Attribute Range: 2-32

## Netconf edit-config payload

```
<event-manager xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-event-manager">
<policies>
<policy>
  <policy-name>NAME</policy-name>
  <config>
    <policy-name>NAME</policy-name>
    <event-name>NAME</event-name>
  </config>
  <action-name>NAME</action-name>
</policy>
</policies>
</event-manager>
```

## Command Syntax

```
event-manager policy NAME event NAME action NAME
```

---

## clear event-manager statistics all

### Netconf RPC payload

```
<event-manager-clear-statistics-all xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-event-manager"/>
```

## Command Syntax

```
clear event-manager statistics all
```

---

## clear event-manager statistics policy NAME

Attribute Name: policy-name

Attribute Type: string

### Netconf RPC payload

```
<event-manager-clear-statistics-on-policy xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-event-manager">
  <policy-name>NAME</policy-name>
</event-manager-clear-statistics-on-policy>
```

### Command Syntax

```
clear event-manager statistics policy NAME
```

---

## IPI-LOGGING-FAULT-MANAGEMENT

---

### Configure enable fault management

Enable Fault Management System

Attribute Name: enable-fault-management

Attribute Type: uint8

### Netconf edit-config payload

```
<logging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
  <fault-management>
    <config>
      </enable-fault-management><!-- operation="delete"-->
    </config>
  </fault-management>
</logging>
```

### Command Syntax

```
fault-management enable
```

---

### fault-management flush-db

### Netconf RPC payload

```
<ipi-logging-fault-management_logging-fms-flush-db xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging"/>
```

### Command Syntax

```
fault-management flush-db
```

---

### fault-management shelve ALARM-TYPE

Attribute Name: alarm-type

Attribute Type: string

### Netconf RPC payload

```
<ipi-logging-fault-management_logging-fms-shelve xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-logging">
```

```
<alarm-type>ALARM-TYPE</alarm-type>
</ipi-logging-fault-management_logging-fms-shelve>
```

### Command Syntax

```
fault-management shelve ALARM-TYPE
```

---

## fault-management close ACTIVE-ALARM-ID

Attribute Name: active-alarm-id

Attribute Type: string

### Netconf RPC payload

```
<ipi-logging-fault-management_logging-fms-close xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-logging">
  <active-alarm-id>ACTIVE-ALARM-ID</active-alarm-id>
</ipi-logging-fault-management_logging-fms-close>
```

### Command Syntax

```
fault-management close ACTIVE-ALARM-ID
```

---

## IPI-DHCP

---

### Configure disable dhcp feature

Disable the DHCP client and DHCP relay on the device.

Attribute Name: disable-dhcp-feature

Attribute Type: uint8

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <global>
    <config>
      </disable-dhcp-feature><!-- operation="delete"-->
    </config>
  </global>
</dhcp>
```

### Command Syntax

```
no feature dhcp
```



---

## IPI-RADIUS

---

### Configure vrf name

VRF Name associated with this instance

This command is supported when following feature are enabled aaa feature

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

### Netconf edit-config payload

```
<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        <key-type>0</key-type> <!-- operation="delete"-->
        <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</radius>
```

### Command Syntax

```
radius-server login key (0|7) WORD (vrf management|)
```

---

### Configure timeout

VRF Name associated with this instance

This command is supported when following feature are enabled aaa feature

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: timeout

Attribute Type: uint8

Attribute Range: 1-60

### Netconf edit-config payload

```
<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
```

```

<vrf>
  <vrf-name>management</vrf-name>
  <config>
    <vrf-name>management</vrf-name>
    <timeout>1</timeout> <!-- operation="delete"-->
  </config>
</vrf>
</vrfs>
</radius>

```

### Command Syntax

```
radius-server login timeout <1-60> (vrf management|)
```

---

## Configure sequence number

Use this attribute to set the sequence-number/priority index for the RADIUS server

This command is supported when following feature are enabled aaa feature

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

### Netconf edit-config payload

```

<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number>
      </config>
    </server>
  </remote-servers>
</radius>

```

### Command Syntax

```
radius-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf management|) seq-num <1-8>
```

---

## Configure secret key string

Shared key used between the authentication-server and the device

This command is supported when following feature are enabled aaa feature

Attribute Name: secret-key-string

Attribute Type: string

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

Attribute Name: key-type

Attribute Type: enum (0|7)

### Netconf edit-config payload

```
<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
        <key-type>0</key-type> <!-- operation="delete"-->
      </config>
      <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
    </server>
  </remote-servers>
</radius>
```

### Command Syntax

```
radius-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf management|) seq-num <1-8> key (0|7) WORD
```

---

## Configure accounting port

Use this attribute to configure a RADIUS server and specify a UDP port to use for RADIUS accounting messages

This command is supported when following feature are enabled aaa feature

Attribute Name: accounting-port

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

### Netconf edit-config payload

```
<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
        <key-type>0</key-type> <!-- operation="delete"-->
        <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
      </config>
      <accounting-port>0</accounting-port> <!-- operation="delete"-->
    </server>
  </remote-servers>
</radius>
```

### Command Syntax

```
radius-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf management|) seq-num <1-8> key (0|7) WORD acct-port <0-65535>
```

---

## Configure host address

To represent the timeout configured by the user

This command is supported when following feature are enabled aaa feature

Attribute Name: timeout

Attribute Type: uint8

Default Value: 5

Attribute Range: 1-60

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

Attribute Name: accounting-port

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf edit-config payload

```
<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
        <key-type>0</key-type> <!-- operation="delete"-->
        <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
        <accounting-port>0</accounting-port> <!-- operation="delete"-->
      </config>
      <timeout>1</timeout> <!-- operation="delete"-->
    </server>
  </remote-servers>
</radius>
```

### Command Syntax

```
radius-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf management|) seq-num <1-8> key (0|7) WORD acct-port <0-65535> timeout <1-60>
```

## Configure authentication port

Use this attribute to configure a RADIUS server and specify a UDP port to use for RADIUS authentication messages

This command is supported when following feature are enabled aaa feature

Attribute Name: authentication-port

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

### Netconf edit-config payload

```

<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
        <key-type>0</key-type> <!-- operation="delete"-->
        <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
      </config>
      <authentication-port>0</authentication-port> <!-- operation="delete"-->
    </server>
  </remote-servers>
</radius>

```

### Command Syntax

```

radius-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf management|) seq-num <1-8> key (0|7) WORD auth-port <0-65535>

```

## Configure key type

Use this attribute to configure a RADIUS server and specify a UDP port to use for RADIUS accounting messages

This command is supported when following feature are enabled aaa feature

Attribute Name: accounting-port

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

Attribute Name: authentication-port

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf edit-config payload

```

<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
        <key-type>0</key-type> <!-- operation="delete"-->
        <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
        <authentication-port>0</authentication-port> <!-- operation="delete"-->
      </config>
      <accounting-port>0</accounting-port> <!-- operation="delete"-->
    </server>
  </remote-servers>
</radius>

```

### Command Syntax

```

radius-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf management|) seq-num <1-8> key (0|7) WORD auth-port <0-65535> acct-port <0-65535>

```

### Configure enable

This attribute is to enable/disable RADIUS debug logging

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</radius>
```

### Command Syntax

```
debug radius
```

---

## clear radius-server counters (vrf management|)

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<radius-clear-all-server-counters xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-radius">
  <vrf-name>management</vrf-name>
</radius-clear-all-server-counters>
```

### Command Syntax

```
clear radius-server counters (vrf management|)
```

---

## clear radius-server host (A.B.C.D|X:X::X:X|HOSTNAME) counters (vrf (management|all)|)

Attribute Name: hostname

Attribute Type: union

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<radius-clear-server-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
radius">
  <hostname>A.B.C.D</hostname>
  <vrf-name>management</vrf-name>
</radius-clear-server-counters>
```

### Command Syntax

```
clear radius-server host (A.B.C.D|X:X::X:X|HOSTNAME) counters (vrf
(management|all) |)
```



---

## debug radius

### Netconf RPC payload

```
<radius-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius"/>
```

### Command Syntax

```
debug radius
```

---

## no debug radius

### Netconf RPC payload

```
<radius-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-radius"/>
```

### Command Syntax

```
no debug radius
```

---

---

# IPI-USER-MANAGEMENT

---

## Configure enable

Use this attribute to enable user management debugging information.

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</user-management>
```

### Command Syntax

```
debug user-mgmt
```

---

## Configure disable default user

Use this attribute to prevent default user from being enabled at start up

Attribute Name: disable-default-user

Attribute Type: empty

**Netconf edit-config payload**

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <global>
    <config>
      </disable-default-user><!-- operation="delete"-->
    </config>
  </global>
</user-management>
```

**Command Syntax**

```
username disable-default
```

---

**Configure username**

Login name of the user

Attribute Name: username

Attribute Type: string

Attribute Range: 2-32

**Netconf edit-config payload**

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <users>
    <user> <!-- operation="delete"-->
      <username>USERNAME</username>
      <config>
        <username>USERNAME</username>
      </config>
    </user>
  </users>
</user-management>
```

**Command Syntax**

```
username USERNAME
```

---

**Configure role**

Use this attribute to set the user role. Operations that an user is allowed to perform are determined based on the role

Attribute Name: role

Attribute Type: enum (network-admin|network-engineer|network-operator|network-user)

**Netconf edit-config payload**

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <users>
    <user>
      <username>USERNAME</username>
      <config>
        <username>USERNAME</username>
      </config>
    </user>
  </users>
</user-management>
```

```

    </config>
    <role>network-admin</role> <!-- operation="delete"-->
</user>
</users>
</user-management>

```

## Command Syntax

```
username USERNAME role (network-admin|network-engineer|network-operator|network-user)
```

---

## Configure password

Use this attribute to add a user or to change a user password.

Attribute Name: password

Attribute Type: string

Attribute Range: 8-32

Attribute Name: role

Attribute Type: enum (network-admin|network-engineer|network-operator|network-user)

## Netconf edit-config payload

```

<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
<users>
<user>
    <username>USERNAME</username>
    <config>
        <username>USERNAME</username>
        <role>network-admin</role> <!-- operation="delete"-->
    </config>
    <password>PASSWORD</password> <!-- operation="delete"-->
</user>
</users>
</user-management>

```

## Command Syntax

```
username USERNAME role (network-admin|network-engineer|network-operator|network-user) password PASSWORD
```

---

## Configure password hashed

Use this attribute to specify user password in encrypted form. This option is provided for reconfiguring a user password using an earlier encrypted password that was available in running configuration display or get-config payload. Users are advised not to use this option for entering passwords generated in any other method

Attribute Name: password-hashed

Attribute Type: string

Attribute Range: 26-106

Attribute Name: role

Attribute Type: enum (network-admin|network-engineer|network-operator|network-user)

### Netconf edit-config payload

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <users>
    <user>
      <username>USERNAME</username>
      <config>
        <username>USERNAME</username>
        <role>network-admin</role> <!-- operation="delete"-->
      </config>
      <password-hashed>PASSWORD</password-hashed> <!-- operation="delete"-->
    </user>
  </users>
</user-management>
```

### Command Syntax

```
username USERNAME role (network-admin|network-engineer|network-operator|network-
user) password encrypted PASSWORD
```

---

## Configure rbac role

Use this attribute to set the user role. Operations that an user is allowed to perform are determined based on the role

Attribute Name: rbac-role

Attribute Type: string

### Netconf edit-config payload

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <users>
    <user>
      <username>USERNAME</username>
      <config>
        <username>USERNAME</username>
      </config>
      <rbac-role>ROLE-NAME</rbac-role> <!-- operation="delete"-->
    </user>
  </users>
</user-management>
```

### Command Syntax

```
username USERNAME role ROLE-NAME
```

---

## debug user-mgmt

### Netconf RPC payload

```
<user-management-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-user-management"/>
```

---

## Command Syntax

```
debug user-mgmt
```

---

## no debug user-mgmt

### Netconf RPC payload

```
<user-management-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-user-management"/>
```

## Command Syntax

```
no debug user-mgmt
```

---

# IPI-SSH

---

## Configure enable

Use this attribute to enable ssh debugging configurations

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</ssh-server>
```

## Command Syntax

```
debug ssh server
```

---

## Configure vrf name

Use this attribute to enable the SSH server.

Attribute Name: enable

Attribute Type: boolean

### Netconf edit-config payload

```
<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
</ssh-server>
```

```

    </config>
    <enable>true</enable> <!-- operation="delete"-->
</vrf>
</vrfs>
</ssh-server>

```

## Command Syntax

```
feature ssh (vrf (NAME|management) |)
```

---

## Configure port

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: port

Attribute Type: uint32

Attribute Range: 1024-65535

## Netconf edit-config payload

```

<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
<vrfs>
<vrf>
    <vrf-name>NAME</vrf-name>
    <config>
        <vrf-name>NAME</vrf-name>
        <port>1024</port> <!-- operation="delete"-->
    </config>
</vrf>
</vrfs>
</ssh-server>

```

## Command Syntax

```
ssh server port <1024-65535> (vrf (NAME|management) |)
```

---

## Configure max login attempts

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: max-login-attempts

Attribute Type: uint8

Default Value: 3

Attribute Range: 1-3

**Netconf edit-config payload**

```

<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
        <max-login-attempts>1</max-login-attempts> <!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</ssh-server>

```

**Command Syntax**

```
ssh login-attempts <1-3> (vrf (NAME|management) |)
```

---

**Configure session limit**

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: session-limit

Attribute Type: uint8

Attribute Range: 1-40

**Netconf edit-config payload**

```

<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
        <session-limit>1</session-limit> <!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</ssh-server>

```

**Command Syntax**

```
ssh server session-limit <1-40> (vrf (NAME|management) |)
```

---

**Configure default algorithm**

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: default-algorithm

Attribute Type: empty

### Netconf edit-config payload

```
<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
        </default-algorithm><!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</ssh-server>
```

### Command Syntax

```
ssh server default algorithm (vrf (NAME|management)|)
```

---

## Configure chacha20 poly1305

Use this attribute to set the ChaCha20-Poly1305 Cipher

This command is supported when following feature are enabled ssh server feature

Attribute Name: chacha20-poly1305

Attribute Type: empty

Attribute Name: aes128-ctr

Attribute Type: empty

Attribute Name: aes192-ctr

Attribute Type: empty

Attribute Name: aes256-ctr

Attribute Type: empty

Attribute Name: aes128-cbc

Attribute Type: empty

Attribute Name: aes192-cbc

Attribute Type: empty

Attribute Name: aes256-cbc

Attribute Type: empty

Attribute Name: triple-des-cbc

Attribute Type: empty

Attribute Name: rijndael-cbc

Attribute Type: empty

Attribute Name: aes128-gcm



Attribute Type: empty

Attribute Name: aes256-gcm

Attribute Type: empty

### Netconf edit-config payload

```
<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <encryption-algorithms>
    <config>
      </aes128-ctr><!-- operation="delete"-->
      </aes192-ctr><!-- operation="delete"-->
      </aes256-ctr><!-- operation="delete"-->
      </aes128-cbc><!-- operation="delete"-->
      </aes192-cbc><!-- operation="delete"-->
      </aes256-cbc><!-- operation="delete"-->
      </triple-des-cbc><!-- operation="delete"-->
      </rijndael-cbc><!-- operation="delete"-->
      </aes128-gcm><!-- operation="delete"-->
      </aes256-gcm><!-- operation="delete"-->
      </chacha20-poly1305><!-- operation="delete"-->
    </config>
  </encryption-algorithms>
</ssh-server>
```

### Command Syntax

```
ssh server algorithm encryption { aes128-ctr| aes192-ctr| aes256-ctr| aes128-cbc|
  aes192-cbc| aes256-cbc| 3des-cbc| rijndael-cbc| aes128-gcm| aes256-gcm| chacha20-
  poly1305 } (vrf (NAME|management))
```

---

## Configure curve25519 sha256 libssh org

Use this attribute to set the Curve25519 SHA256 @libssh.org algorithm

This command is supported when following feature are enabled ssh server feature

Attribute Name: curve25519-sha256-libssh-org

Attribute Type: empty

Attribute Name: diffie-hellman-group1-sha1

Attribute Type: empty

Attribute Name: diffie-hellman-group14-sha1

Attribute Type: empty

Attribute Name: diffie-hellman-group14-sha256

Attribute Type: empty

Attribute Name: diffie-hellman-group16-sha512

Attribute Type: empty

Attribute Name: diffie-hellman-group18-sha512

Attribute Type: empty

Attribute Name: diffie-hellman-group-exchange-sha1

Attribute Type: empty

Attribute Name: diffie-hellman-group-exchange-sha256

Attribute Type: empty

Attribute Name: ecdh-sha2-nistp256

Attribute Type: empty

Attribute Name: ecdh-sha2-nistp384

Attribute Type: empty

Attribute Name: ecdh-sha2-nistp521

Attribute Type: empty

Attribute Name: curve25519-sha256

Attribute Type: empty

### Netconf edit-config payload

```
<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <kex-algorithms>
    <config>
      </diffie-hellman-group1-sha1><!-- operation="delete"-->
      </diffie-hellman-group14-sha1><!-- operation="delete"-->
      </diffie-hellman-group14-sha256><!-- operation="delete"-->
      </diffie-hellman-group16-sha512><!-- operation="delete"-->
      </diffie-hellman-group18-sha512><!-- operation="delete"-->
      </diffie-hellman-group-exchange-sha1><!-- operation="delete"-->
      </diffie-hellman-group-exchange-sha256><!-- operation="delete"-->
      </ecdh-sha2-nistp256><!-- operation="delete"-->
      </ecdh-sha2-nistp384><!-- operation="delete"-->
      </ecdh-sha2-nistp521><!-- operation="delete"-->
      </curve25519-sha256><!-- operation="delete"-->
      </curve25519-sha256-libssh-org><!-- operation="delete"-->
    </config>
  </kex-algorithms>
</ssh-server>
```

```
</vrfs>
</ssh-server>
```

## Command Syntax

```
ssh server algorithm kex { diffie-hellman-group1-sha1| diffie-hellman-group14-sha1|
diffie-hellman-group14-sha256| diffie-hellman-group16-sha512| diffie-hellman-
group18-sha512| diffie-hellman-group-exchange-sha1| diffie-hellman-group-
exchange-sha256| ecdh-sha2-nistp256| ecdh-sha2-nistp384| ecdh-sha2-nistp521|
curve25519-sha256| curve25519-sha256-libssh-org } (vrf (NAME|management)|)
```

---

## Configure umac 128 etm

Use this attribute to set the UMAC-128-ETM @openssh.com MAC

This command is supported when following feature are enabled ssh server feature

Attribute Name: umac-128-etm

Attribute Type: empty

Attribute Name: hmac-sha1

Attribute Type: empty

Attribute Name: hmac-sha1-96

Attribute Type: empty

Attribute Name: hmac-sha2-256

Attribute Type: empty

Attribute Name: hmac-sha2-512

Attribute Type: empty

Attribute Name: hmac-md5

Attribute Type: empty

Attribute Name: hmac-md5-96

Attribute Type: empty

Attribute Name: umac-64

Attribute Type: empty

Attribute Name: umac-128

Attribute Type: empty

Attribute Name: hmac-sha1-etm

Attribute Type: empty

Attribute Name: hmac-sha1-96-etm

Attribute Type: empty

Attribute Name: hmac-sha2-256-etm

Attribute Type: empty

Attribute Name: hmac-sha2-512-etm

Attribute Type: empty

Attribute Name: hmac-md5-etm

Attribute Type: empty

Attribute Name: hmac-md5-96-etm

Attribute Type: empty

Attribute Name: umac-64-etm

Attribute Type: empty

### Netconf edit-config payload

```
<ssh-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <mac-algorithms>
    <config>
      </hmac-sha1><!-- operation="delete"-->
      </hmac-sha1-96><!-- operation="delete"-->
      </hmac-sha2-256><!-- operation="delete"-->
      </hmac-sha2-512><!-- operation="delete"-->
      </hmac-md5><!-- operation="delete"-->
      </hmac-md5-96><!-- operation="delete"-->
      </umac-64><!-- operation="delete"-->
      </umac-128><!-- operation="delete"-->
      </hmac-sha1-etm><!-- operation="delete"-->
      </hmac-sha1-96-etm><!-- operation="delete"-->
      </hmac-sha2-256-etm><!-- operation="delete"-->
      </hmac-sha2-512-etm><!-- operation="delete"-->
      </hmac-md5-etm><!-- operation="delete"-->
      </hmac-md5-96-etm><!-- operation="delete"-->
      </umac-64-etm><!-- operation="delete"-->
      </umac-128-etm><!-- operation="delete"-->
    </config>
  </mac-algorithms>
</ssh-server>
```

### Command Syntax

```
ssh server algorithm mac { hmac-sha1| hmac-sha1-96| hmac-sha2-256| hmac-sha2-512|
  hmac-md5| hmac-md5-96| umac-64| umac-128| hmac-sha1-etm| hmac-sha1-96-etm| hmac-
  sha2-256-etm| hmac-sha2-512-etm| hmac-md5-etm| hmac-md5-96-etm| umac-64-etm|
  umac-128-etm } (vrf (NAME|management) |)
```

## Configure public key

Use this attribute to set the ssh public-key

Attribute Name: public-key

Attribute Type: string

### Netconf edit-config payload

```
<user-management xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-management">
  <users>
    <user>
      <username>USERNAME</username>
      <config>
        <username>USERNAME</username>
      </config>
      <ssh-keys xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
        <config>
          <public-key>LINE</public-key> <!-- operation="delete"-->
        </config>
      </ssh-keys>
    </user>
  </users>
</user-management>
```

### Command Syntax

```
username USERNAME sshkey LINE
```

---

## debug ssh server

### Netconf RPC payload

```
<ssh-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh"/>
```

### Command Syntax

```
debug ssh server
```

---

## no debug ssh server

### Netconf RPC payload

```
<ssh-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh"/>
```

### Command Syntax

```
no debug ssh server
```

---

## clear ssh hosts

### Netconf RPC payload

```
<ssh-clear-hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh"/>
```

### Command Syntax

```
clear ssh hosts
```

---

## ssh keygen host dsa (vrf (NAME|management)) (force|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: force

Attribute Type: boolean

Default Value: false

### Netconf RPC payload

```
ssh">
  <ssh-generate-server-dsa-key xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
  <vrf-name>NAME</vrf-name>
  <force>true</force/>
  </ssh-generate-server-dsa-key>
```

### Command Syntax

```
ssh keygen host dsa (vrf (NAME|management)) (force|)
```

---

## ssh keygen host rsa (length <1024-4096>|) (vrf (NAME|management)) (force|)

Attribute Name: length

Attribute Type: uint32

Default Value: 2048

Attribute Range: 1024-4096

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: force

Attribute Type: boolean

Default Value: false

### Netconf RPC payload

```
ssh">
  <ssh-generate-server-rsa-key xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
  <length>1024</length>
  <vrf-name>NAME</vrf-name>
  <force>true</force/>
  </ssh-generate-server-rsa-key>
```

### Command Syntax

```
ssh keygen host rsa (length <1024-4096>|) (vrf (NAME|management)) (force|)
```

---

## ssh keygen host ecdsa (length (256|384|521)|) (vrf (NAME|management)|) (force|)

Attribute Name: length

Attribute Type: enum (256|384|521)

Default Value: 521

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: force

Attribute Type: boolean

Default Value: false

### Netconf RPC payload

```
<ssh-generate-server-ecdsa-key xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <length>521</length>
  <vrf-name>NAME</vrf-name>
  <force>true</force/>
</ssh-generate-server-ecdsa-key>
```

### Command Syntax

```
ssh keygen host ecdsa (length (256|384|521)|) (vrf (NAME|management)|) (force|)
```

---

## ssh keygen host ed25519 (vrf (NAME|management)|) (force|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: force

Attribute Type: boolean

Default Value: false

### Netconf RPC payload

```
<ssh-generate-server-ed25519-key xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <vrf-name>NAME</vrf-name>
  <force>true</force/>
</ssh-generate-server-ed25519-key>
```

### Command Syntax

```
ssh keygen host ed25519 (vrf (NAME|management)|) (force|)
```

---

**clear ssh host-key ((dsa|rsa|ecdsa|ed25519)) (vrf (NAME|management))**

Attribute Name: type

Attribute Type: enum (all-keys|dsa|rsa|ecdsa|ed25519)

Default Value: all-keys

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

**Netconf RPC payload**

```
<ssh-clear-server-keys xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <type>all-keys</type>
  <vrf-name>NAME</vrf-name>
</ssh-clear-server-keys>
```

**Command Syntax**

```
clear ssh host-key ((dsa|rsa|ecdsa|ed25519)) (vrf (NAME|management))
```

---

**username USERNAME keypair rsa (length <1024-4096>|) (force|)**

Attribute Name: user-name

Attribute Type: string

Attribute Name: length

Attribute Type: uint32

Default Value: 4096

Attribute Range: 1024-4096

Attribute Name: force

Attribute Type: boolean

Default Value: false

**Netconf RPC payload**

```
<ssh-generate-user-rsa-key xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <user-name>USERNAME</user-name>
  <length>1024</length>
  <force>true</force>
</ssh-generate-user-rsa-key>
```

**Command Syntax**

```
username USERNAME keypair rsa (length <1024-4096>|) (force|)
```

---

**username USERNAME keypair dsa (force|)**

Attribute Name: user-name

Attribute Type: string



Attribute Name: force

Attribute Type: boolean

Default Value: false

### Netconf RPC payload

```
<ssh-generate-user-dsa-key xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <user-name>USERNAME</user-name>
  <force>true</force>
</ssh-generate-user-dsa-key>
```

### Command Syntax

```
username USERNAME keypair dsa (force|)
```

---

## clear ssh keypair user USERNAME

Attribute Name: user-name

Attribute Type: string

### Netconf RPC payload

```
<ssh-clear-user-keys xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ssh">
  <user-name>USERNAME</user-name>
</ssh-clear-user-keys>
```

### Command Syntax

```
clear ssh keypair user USERNAME
```

---

## IPI-TELNET

---

### Configure enable

Use this attribute to enable telnet debugging configurations

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<telnet-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-telnet">
  <debug>
  <config>
    </enable><!-- operation="delete"-->
  </config>
</debug>
</telnet-server>
```

### Command Syntax

```
debug telnet server
```

---

## Configure vrf name

Use this attribute to enable the Telnet server.

Attribute Name: enable

Attribute Type: boolean

### Netconf edit-config payload

```
<telnet-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-telnet">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <enable>true</enable> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</telnet-server>
```

### Command Syntax

```
feature telnet (vrf (NAME|management) |)
```

---

## Configure port

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: port

Attribute Type: uint32

Attribute Range: 1024-65535

### Netconf edit-config payload

```
<telnet-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-telnet">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
        <port>1024</port> <!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</telnet-server>
```

### Command Syntax

```
telnet server port <1024-65535> (vrf (NAME|management) |)
```

---

## Configure session limit

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: session-limit

Attribute Type: uint8

Attribute Range: 1-40

### Netconf edit-config payload

```
<telnet-server xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-telnet">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
        <session-limit>1</session-limit> <!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</telnet-server>
```

### Command Syntax

```
telnet server session-limit <1-40> (vrf (NAME|management) |)
```

---

## debug telnet server

### Netconf RPC payload

```
<telnet-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
telnet"/>
```

### Command Syntax

```
debug telnet server
```

---

## no debug telnet server

### Netconf RPC payload

```
<telnet-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
telnet"/>
```

### Command Syntax

```
no debug telnet server
```

---

## IPI-NTP

---

### Configure feature enable

Use this attribute to enable or disable NTP feature.

Attribute Name: feature-enable

Attribute Type: boolean

#### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        </config>
        <feature-enable>true</feature-enable> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </ntp>
```

#### Command Syntax

```
feature ntp (vrf (management|NAME) |)
```

---

### Configure vrf name

Use this attribute to enable or disable NTP feature.

Attribute Name: feature-enable

Attribute Type: boolean

#### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        </config>
        <feature-enable>true</feature-enable> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </ntp>
```

#### Command Syntax

```
no feature ntp (vrf (management|NAME) |)
```

---

## Configure enable ntp

Use this attribute to enable or disable NTP server

Attribute Name: enable-ntp

Attribute Type: boolean

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        </config>
        <enable-ntp>true</enable-ntp> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </ntp>
```

### Command Syntax

```
ntp enable (vrf (management|NAME) |)
```

---

## Configure enable logging

Use this attribute to specify the vrf for which ntp feature is enabled

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: enable-logging

Attribute Type: empty

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        </enable-logging><!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</ntp>
```

### Command Syntax

```
ntp logging (vrf (management|NAME) |)
```

---

## Configure enable local master

Use this attribute to configure the device as an NTP server.

Attribute Name: enable-local-master

Attribute Type: empty

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <ref-clock-master>
      <config>
        </enable-local-master>
      </config>
    </ref-clock-master>
  </vrf>
</vrfs>
</ntp>
```

### Command Syntax

```
ntp master (vrf (management|NAME) |)
```

---

## Configure local stratum

Use this attribute to configure stratum level for a NTP server.

Attribute Name: local-stratum

Attribute Type: uint8

Attribute Range: 1-15

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <ref-clock-master>
      <config>
        <local-stratum>1</local-stratum> <!-- operation="delete"-->
      </config>
    </ref-clock-master>
  </vrf>
</vrfs>
```

---

```
</ntp>
```

## Command Syntax

```
ntp master stratum <1-15> (vrf (management|NAME) |)
```

---

## Configure enable ntp auth

Use this attribute to enable NTP authentication.

Attribute Name: enable-ntp-auth

Attribute Type: empty

## Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <authentication>
      <config>
        </enable-ntp-auth><!-- operation="delete"-->
      </config>
    </authentication>
  </vrf>
</vrfs>
</ntp>
```

## Command Syntax

```
ntp authenticate (vrf (management|NAME) |)
```

---

## Configure ntp trusted keys

Use this attribute to configure one or more trusted authentication keys. If a key is trusted, the device will synchronize with a system that specifies this key in its NTP packets

Attribute Name: ntp-trusted-keys

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <authentication>
```

```

<config>
  <ntp-trusted-keys>1</ntp-trusted-keys> <!-- operation="delete"-->
</config>
</authentication>
</vrf>
</vrfs>
</ntp>

```

## Command Syntax

```
ntp trusted-key <1-65535> (vrf (management|NAME) |)
```

---

## Configure ntp request key

Use this to attribute to configure request key which shall be used as password for ntpdc utility.

Attribute Name: ntp-request-key

Attribute Type: uint32

Attribute Range: 1-65534

## Netconf edit-config payload

```

<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <authentication>
    <config>
      <ntp-request-key>1</ntp-request-key> <!-- operation="delete"-->
    </config>
  </authentication>
</ntp>

```

## Command Syntax

```
ntp request-key <1-65534> (vrf (management|NAME) |)
```

---

## Configure key id

Use this attribute to set an NTP authentication key.

Attribute Name: key-id

Attribute Type: uint32

Attribute Range: 1-65535

Attribute Name: key-value

Attribute Type: string



Attribute Name: key-type

Attribute Type: enum (0|7)

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <authentication>
    <ntp-keys>
      <ntp-key> <!-- operation="delete"-->
        <key-id>1</key-id>
        <config>
          <key-id>1</key-id>
          <key-value>WORD</key-value>
          <key-type>1</key-type>
        </config>
      </ntp-key>
    </ntp-keys>
  </authentication>
</ntp>
```

### Command Syntax

```
ntp authentication-key <1-65535> md5 WORD 7 (vrf (management|NAME) |)
```

## Configure key value

Use this attribute to set an NTP authentication key.

Attribute Name: key-id

Attribute Type: uint32

Attribute Range: 1-65535

Attribute Name: key-value

Attribute Type: string

Attribute Name: key-type

Attribute Type: enum (0|7)

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
```

```

        <vrf-name>management</vrf-name>
    </config>
</authentication>
<ntp-keys>
<ntp-key> <!-- operation="delete"-->
    <key-id>1</key-id>
    <config>
        <key-id>1</key-id>
        <key-value>WORD</key-value>
        <key-type>0</key-type>
    </config>
</ntp-key>
</ntp-keys>
</authentication>
</vrf>
</vrfs>
</ntp>

```

## Command Syntax

```
ntp authentication-key <1-65535> md5 WORD (vrf (management|NAME) |)
```

---

## Configure prefer

preferred NTP server/peer

Attribute Name: prefer

Attribute Type: empty

Attribute Name: auth-key

Attribute Type: uint32

Default Value: 65535

Attribute Range: 1-65535

Attribute Name: minpoll

Attribute Type: uint16

Default Value: 4

Attribute Range: 4-16

Attribute Name: maxpoll

Attribute Type: uint16

Default Value: 6

Attribute Range: 4-16

## Netconf edit-config payload

```

<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
    </vrf>
  </vrfs>
</ntp>

```

```

    <config>
      <vrf-name>management</vrf-name>
    </config>
  </servers>
</server>
  <server-address>A.B.C.D</server-address>
  <config>
    <server-address>A.B.C.D</server-address>
    <auth-key>1</auth-key> <!-- operation="delete"-->
    <minpoll>4</minpoll> <!-- operation="delete"-->
    <maxpoll>4</maxpoll> <!-- operation="delete"-->
  </config>
  </prefer><!-- operation="delete"-->
</server>
</servers>
</vrf>
</vrfs>
</ntp>

```

## Command Syntax

```

ntp server (A.B.C.D|X:X::X:X|HOSTNAME) { key <1-65535>| minpoll <4-16>| maxpoll <4-16>| prefer } (vrf (management|NAME)|)

```

## Configure server address

Use this attribute to set the NTP server IP address or hostname

Attribute Name: server-address

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </servers>
    <server>
      <server-address>A.B.C.D</server-address>
      <config>
        <server-address>A.B.C.D</server-address>
      </config>
    </server>
  </servers>
</vrf>
</vrfs>
</ntp>

```

## Command Syntax

```
ntp server (A.B.C.D|X:X::X:X|HOSTNAME) (vrf (management|NAME) |)
```

---

## Configure peer address

preferred NTP server/peer

Attribute Name: prefer

Attribute Type: empty

Attribute Name: auth-key

Attribute Type: uint32

Default Value: 65535

Attribute Range: 1-65535

Attribute Name: minpoll

Attribute Type: uint16

Default Value: 4

Attribute Range: 4-16

Attribute Name: maxpoll

Attribute Type: uint16

Default Value: 6

Attribute Range: 4-16

## Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <peers>
    <peer>
      <peer-address>A.B.C.D</peer-address>
      <config>
        <peer-address>A.B.C.D</peer-address>
        <auth-key>1</auth-key> <!-- operation="delete"-->
        <minpoll>4</minpoll> <!-- operation="delete"-->
        <maxpoll>4</maxpoll> <!-- operation="delete"-->
      </config>
      </peer>
    </peer>
  </peers>
</ntp>
```

## Command Syntax

```
ntp peer (A.B.C.D|X:X::X:X|HOSTNAME) { key <1-65535>| minpoll <4-16>| maxpoll <4-16>| prefer } (vrf (management|NAME)|)
```

---

## Configure minimum pkt spacing

Use this attribute to specify the minimum packet spacing to be permitted

Attribute Name: minimum-pkt-spacing

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <rate-limiting>
      <config>
        <minimum-pkt-spacing>1</minimum-pkt-spacing> <!-- operation="delete"-->
      </config>
    </rate-limiting>
  </vrf>
</vrfs>
</ntp>
```

## Command Syntax

```
ntp discard { minimum <1-65535> } (vrf (management|NAME)|)
```

---

## Configure netmask

use this attribute to specify the allowed NTP client IP network mask

Attribute Name: netmask

Attribute Type: union

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <access-control-entries>
      <access-control-entry>
```

```

    <client-ip-address>CML_IP_ADDR_T</client-ip-address>
  <config>
    <client-ip-address>CML_IP_ADDR_T</client-ip-address>
  </config>
    <netmask>NTP_CLIENT_IP_NET_MASK_T</netmask>
</access-control-entry>
</access-control-entries>
</vrf>
</vrfs>
</ntp>

```

### Command Syntax

```
ntp allow (A.B.C.D|X:X::X:X) mask (A.B.C.D|<1-128>) (vrf (management|NAME) |)
```

---

## Configure access options

use this attribute to specify the allowed access options for NTP client

Attribute Name: access-options

Attribute Type: bits (kod|nopeer|noserve|noquery|nomodify|notrap|limited)

### Netconf edit-config payload

```

<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <access-control-entries>
      <access-control-entry>
        <client-ip-address>CML_IP_ADDR_T</client-ip-address>
        <config>
          <client-ip-address>CML_IP_ADDR_T</client-ip-address>
        </config>
        <access-options>kod</access-options> <!-- operation="delete"-->
      </access-control-entry>
    </access-control-entries>
  </vrf>
</vrfs>
</ntp>

```

### Command Syntax

```
ntp allow {kod|nopeer|noserve|noquery|nomodify|notrap|limited} (vrf
(management|NAME) |)
```

---

## Configure client ip address

use this attribute to specify the allowed access options for NTP client

Attribute Name: access-options

Attribute Type: bits (kod|nopeer|noserve|noquery|nomodify|notrap|limited)

Attribute Name: netmask

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <access-control-entries>
    <access-control-entry>
      <client-ip-address>CML_IP_ADDR_T</client-ip-address>
      <config>
        <client-ip-address>CML_IP_ADDR_T</client-ip-address>
        <netmask>NTP_CLIENT_IP_NET_MASK_T</netmask>
      </config>
      <access-options>kod</access-options> <!-- operation="delete"-->
    </access-control-entry>
    </access-control-entries>
  </vrf>
</vrfs>
</ntp>
```

### Command Syntax

```
ntp allow mask {kod|nopeer|noserve|noquery|nomodify|notrap|limited} (vrf
(management|NAME) |)
```

---

## Configure enable

Use this attribute to enable NTP debug logs

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<ntp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</ntp>
```

### Command Syntax

```
debug ntp
```

---

## clear ntp statistics (all-peers|io|local|memory)

Attribute Name: statistics-type

Attribute Type: enum (all-peers|io|local|memory)

### Netconf RPC payload

```
<ntp-clear-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp">
  <statistics-type>all-peers</statistics-type>
</ntp-clear-statistics>
```

### Command Syntax

```
clear ntp statistics (all-peers|io|local|memory)
```

---

## ntp sync-retry (vrf (management|NAME)|)

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<ntp-retry-server-synchronization xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-ntp">
  <vrf-name>management</vrf-name>
</ntp-retry-server-synchronization>
```

### Command Syntax

```
ntp sync-retry (vrf (management|NAME)|)
```

---

## debug ntp

### Netconf RPC payload

```
<ntp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp"/>
```

### Command Syntax

```
debug ntp
```

---

## no debug ntp

### Netconf RPC payload

```
<ntp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ntp"/>
```

### Command Syntax

```
no debug ntp
```



---

## IPI-AAA

---

### Configure authentication method rule

Use this attribute to set AAA methods for authentication

Attribute Name: authentication-method-rule

Attribute Type: string

#### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
      <authentication-method-rule>LINE</authentication-method-rule> <!--
operation="delete"-->
    </vrf>
  </vrfs>
</aaa>
```

#### Command Syntax

```
aaa authentication login default (vrf (management|NAME)|) group LINE
```

---

### Configure vrf name

Use this attribute to set AAA methods for authentication

Attribute Name: authentication-method-rule

Attribute Type: string

#### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
      <authentication-method-rule>LINE</authentication-method-rule> <!--
operation="delete"-->
    </vrf>
  </vrfs>
</aaa>
```

---

## Command Syntax

```
aaa authentication login default (vrf (management|NAME)|) local
```

---

## Configure accounting method rule

Use this attribute to set AAA methods for accounting

Attribute Name: accounting-method-rule

Attribute Type: string

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
      <accounting-method-rule>LINE</accounting-method-rule> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</aaa>
```

## Command Syntax

```
aaa accounting default (vrf (management|NAME)|) group LINE
```

---

## Configure authorization method rule

Use this attribute to set AAA methods for authorization

Attribute Name: authorization-method-rule

Attribute Type: string

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
      <authorization-method-rule>LINE</authorization-method-rule> <!--
operation="delete"-->
    </vrf>
  </vrfs>
</aaa>
```

## Command Syntax

```
aaa authorization default (vrf (management|NAME)|) group LINE
```

---

## Configure error enable

This is to enable error message on login failures

Attribute Name: error-enable

Attribute Type: uint8

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
      </error-enable><!-- operation="delete"-->
    </vrf>
  </vrfs>
</aaa>
```

### Command Syntax

```
aaa authentication login error-enable (vrf (management|NAME) |)
```

---

## Configure enable fallback

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: enable-fallback

Attribute Type: empty

Attribute Name: non-existent

Attribute Type: boolean

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        </enable-fallback>
        <non-existent>true</non-existent>
      </config>
    </vrf>
  </vrfs>
</aaa>
```

## Command Syntax

```
aaa authentication login default fallback error local (non-existent-user|) (vrf
(management|NAME) |)
```

---

## Configure group type

This is to create server group type

Attribute Name: group-type

Attribute Type: enum (tacacs+|radius)

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
<vrfs>
<vrf>
  <vrf-name>management</vrf-name>
  <config>
    <vrf-name>management</vrf-name>
  </config>
</server-groups>
<server-group> <!-- operation="delete"-->
  <group-name>WORD</group-name>
  <config>
    <group-name>WORD</group-name>
    <group-type>tacacs+</group-type>
  </config>
  <group-type>tacacs+</group-type>
</server-group>
</server-groups>
</vrf>
</vrfs>
</aaa>
```

## Command Syntax

```
aaa group server (tacacs+|radius) WORD (vrf (management|NAME) |)
```

---

## Configure host address

Use this attribute to add a host address to a server group

Attribute Name: host-address

Attribute Type: union

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
<vrfs>
<vrf>
  <vrf-name>management</vrf-name>
  <config>
    <vrf-name>management</vrf-name>
```

```

    </config>
  <server-groups>
  <server-group>
    <group-name>WORD</group-name>
    <config>
      <group-name>WORD</group-name>
      <group-type>tacacs+</group-type>
    </config>
    <group-type>tacacs+</group-type>
  <server-addresses>
  <server-address> <!-- operation="delete"-->
    <host-address>CML_HOSTNAME_T</host-address>
    <config>
      <host-address>CML_HOSTNAME_T</host-address>
    </config>
  </server-address>
</server-addresses>
</server-group>
</server-groups>
</vrf>
</vrfs>
</aaa>

```

## Command Syntax

```
server (A.B.C.D|X:X::X:X|WORD)
```

---

## Configure group name

Use this attribute to add a host address to a server group

Attribute Name: host-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <vrfs>
  <vrf>
    <vrf-name>management</vrf-name>
    <config>
      <vrf-name>management</vrf-name>
    </config>
  <server-groups>
  <server-group>
    <group-name>WORD</group-name>
    <config>
      <group-name>WORD</group-name>
      <group-type>tacacs+</group-type>
    </config>
    <group-type>tacacs+</group-type>
  <server-addresses>

```

```

    <server-address>
      <host-address>CML_HOSTNAME_T</host-address>
      <config>
        <host-address>CML_HOSTNAME_T</host-address>
      </config>
    </server-address>
  </server-addresses>
</server-group>
</server-groups>
</vrf>
</vrfs>
</aaa>

```

### Command Syntax

```
server server
```

---

## Configure user non existent

This is to enable fallback to local authentication if remote authentication is configured and all AAA servers are unreachable

Attribute Name: enable-fallback

Attribute Type: boolean

Attribute Name: user-non-existent

Attribute Type: boolean

### Netconf edit-config payload

```

<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-authentication-console>
    <config>
      <user-non-existent>true</user-non-existent> <!-- operation="delete"-->
      <enable-fallback>true</enable-fallback> <!-- operation="delete"-->
    </config>
  </aaa-authentication-console>
</aaa>

```

### Command Syntax

```
aaa authentication login console fallback error local (non-existent-user|)
```

---

## Configure authentication max failure attempts

Use this attribute to set the number of unsuccessful authentication attempts before a user is locked out

Attribute Name: authentication-max-failure-attempts

Attribute Type: uint8

Attribute Range: 1-25

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
```

```

<aaa-user>
<config>
  <authentication-max-failure-attempts>1</authentication-max-failure-attempts> <!--
- operation="delete"-->
</config>
</aaa-user>
</aaa>

```

## Command Syntax

```
aaa local authentication attempts max-fail <1-25>
```

---

## Configure local user unlock timeout

Use this attribute to set unlock timeout after local user/s locked out

Attribute Name: local-user-unlock-timeout

Attribute Type: uint16

Attribute Range: 1-3600

## Netconf edit-config payload

```

<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
<aaa-user>
<config>
  <local-user-unlock-timeout>1</local-user-unlock-timeout> <!--
operation="delete"-->
</config>
</aaa-user>
</aaa>

```

## Command Syntax

```
aaa local authentication unlock-timeout <1-3600>
```

---

## Configure enable

Enable feature of applying policy to update password

Attribute Name: enable

Attribute Type: uint8

## Netconf edit-config payload

```

<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
<aaa-user>
<password-policy>
<config>
  </enable><!-- operation="delete"-->
</config>
</password-policy>
</aaa-user>
</aaa>

```

## Command Syntax

```
aaa local authentication password-policy
```

---

## Configure numeric count

The minimum number of digits

Attribute Name: numeric-count

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
      <config>
        <numeric-count>1</numeric-count> <!-- operation="delete"-->
      </config>
    </password-policy>
  </aaa-user>
</aaa>
```

## Command Syntax

```
aaa local authentication password-policy numeric-count <1-32>
```

---

## Configure uppercase count

The minimum number of upper letters

Attribute Name: uppercase-count

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
      <config>
        <uppercase-count>1</uppercase-count> <!-- operation="delete"-->
      </config>
    </password-policy>
  </aaa-user>
</aaa>
```

## Command Syntax

```
aaa local authentication password-policy uppercase-count <1-32>
```



---

## Configure lowercase count

The minimum number of lower letters

Attribute Name: lowercase-count

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
      <config>
        <lowercase-count>1</lowercase-count> <!-- operation="delete"-->
      </config>
    </password-policy>
  </aaa-user>
</aaa>
```

### Command Syntax

```
aaa local authentication password-policy lowercase-count <1-32>
```

---

## Configure special count

The minimum number of special characters

Attribute Name: special-count

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
      <config>
        <special-count>1</special-count> <!-- operation="delete"-->
      </config>
    </password-policy>
  </aaa-user>
</aaa>
```

### Command Syntax

```
aaa local authentication password-policy special-count <1-32>
```

---

## Configure history

history

Attribute Name: history

Attribute Type: uint16

Attribute Range: 1-400

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
      <config>
        <history>1</history> <!-- operation="delete"-->
      </config>
    </password-policy>
  </aaa-user>
</aaa>
```

### Command Syntax

```
aaa local authentication password-policy history <1-400>
```

---

## Configure maxsequence

The maximum number of monotonic character sequences to be accepted.

Attribute Name: maxsequence

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
      <config>
        <maxsequence>1</maxsequence> <!-- operation="delete"-->
      </config>
    </password-policy>
  </aaa-user>
</aaa>
```

### Command Syntax

```
aaa local authentication password-policy maxsequence <1-32>
```

---

## Configure disable usercheck

Disable the check if password contains username

Attribute Name: disable-usercheck

Attribute Type: empty

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
```

```
<password-policy>
<config>
  </disable-usercheck><!-- operation="delete"-->
</config>
</password-policy>
</aaa-user>
</aaa>
```

### Command Syntax

```
aaa local authentication password-policy disable-usercheck
```

---

## Configure maxrepeat

The maximum number of same consecutive characters to be accepted

Attribute Name: maxrepeat

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
<aaa-user>
<password-policy>
<config>
  <maxrepeat>1</maxrepeat> <!-- operation="delete"-->
</config>
</password-policy>
</aaa-user>
</aaa>
```

### Command Syntax

```
aaa local authentication password-policy maxrepeat <1-32>
```

---

## Configure min length

Minimum password length

Attribute Name: min-length

Attribute Type: uint8

Attribute Range: 8-32

### Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
<aaa-user>
<password-policy>
<config>
  <min-length>8</min-length> <!-- operation="delete"-->
</config>
</password-policy>
```

```
</aaa-user>  
</aaa>
```

## Command Syntax

```
aaa local authentication password-policy min-length <8-32>
```

---

## Configure role

use this attribute to set the role for password expiry

Attribute Name: role

Attribute Type: enum (network-admin|network-engineer|network-operator|network-user)

Attribute Name: expire

Attribute Type: uint16

Attribute Range: 0-1000

## Netconf edit-config payload

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">  
  <aaa-user>  
    <password-policy>  
      <role-expdays>  
        <role-expday>  
          <role>network-admin</role>  
          <config>  
            <role>network-admin</role>  
            <expire>0</expire> <!-- operation="delete"-->  
          </config>  
        </role-expday>  
      </role-expdays>  
    </password-policy>  
  </aaa-user>  
</aaa>
```

## Command Syntax

```
aaa local authentication password expire <0-1000> role (network-admin|network-  
engineer|network-operator|network-user)
```

---

## Configure user

use this attribute to set the username for password expiry

Attribute Name: user

Attribute Type: string

Attribute Name: expire

Attribute Type: uint16

Attribute Range: 0-1000

---

**Netconf edit-config payload**

```
<aaa xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <aaa-user>
    <password-policy>
    <user-expdays>
    <user-expday>
      <user>WORD</user>
    <config>
      <user>WORD</user>
      <expire>0</expire> <!-- operation="delete"-->
    </config>
  </user-expday>
</user-expdays>
</password-policy>
</aaa-user>
</aaa>
```

**Command Syntax**

```
aaa local authentication password expire <0-1000> user WORD
```

---

**debug aaa****Netconf RPC payload**

```
<aaa-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa"/>
```

**Command Syntax**

```
debug aaa
```

---

**no debug aaa****Netconf RPC payload**

```
<aaa-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa"/>
```

**Command Syntax**

```
no debug aaa
```

---

**clear aaa local user lockout username USERNAME**

Attribute Name: username

Attribute Type: string

Attribute Range: 2-32

**Netconf RPC payload**

```
<aaa-clear-local-user-lockout xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-aaa">
  <username>USERNAME</username>
</aaa-clear-local-user-lockout>
```

---

## Command Syntax

```
clear aaa local user lockout username USERNAME
```

---

# IPI-DHCP-RELAY

---

## Configure disable dhcpv4 relay

Use this attribute to disable the DHCP relay global config

Attribute Name: disable-dhcpv4-relay

Attribute Type: uint8

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <global>
      <config>
        </disable-dhcpv4-relay><!-- operation="delete"-->
      </config>
    </global>
  </relay>
</dhcp>
```

## Command Syntax

```
no ip dhcp relay
```

---

## Configure disable dhcpv6 relay

Use this attribute to disable the DHCP relay global config

Attribute Name: disable-dhcpv6-relay

Attribute Type: uint8

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <global>
      <config>
        </disable-dhcpv6-relay><!-- operation="delete"-->
      </config>
    </global>
  </relay>
</dhcp>
```

## Command Syntax

```
no ipv6 dhcp relay
```

---

## Configure ipv4 relay interface

Enable relay on Client facing interface

Attribute Name: ipv4-relay-interface

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </ipv4-relay-interface><!-- operation="delete"-->
    </interface>
  </interfaces>
</relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay
```

---

## Configure ipv4 uplink interface

Specify the interface as an uplink interface(Server facing)

Attribute Name: ipv4-uplink-interface

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </ipv4-uplink-interface><!-- operation="delete"-->
    </interface>
  </interfaces>
</relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay uplink
```

---

## Configure ipv4 group name

Correlate specified interface to a specified DHCP server group.

Attribute Name: ipv4-group-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          <ipv4-group-name>GROUP-NAME</ipv4-group-name> <!-- operation="delete"-->
        </config>
      </interface>
    </interfaces>
  </relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay server-select GROUP-NAME
```

---

## Configure ipv6 relay interface

Enable IPv6 relay on Client facing interface

Attribute Name: ipv6-relay-interface

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          <ipv6-relay-interface><!-- operation="delete"-->
        </config>
      </interface>
    </interfaces>
  </relay>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp relay
```



---

## Configure ipv6 uplink interface

Specify the interface as an uplink interface(Server facing)

Attribute Name: ipv6-uplink-interface

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </ipv6-uplink-interface><!-- operation="delete"-->
    </interface>
  </interfaces>
</relay>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp relay uplink
```

---

## Configure ipv6 group name

Correlate specified interface to a specified DHCPv6 server group.

Attribute Name: ipv6-group-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      <ipv6-group-name>GROUP-NAME</ipv6-group-name> <!-- operation="delete"-->
    </interface>
  </interfaces>
</relay>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp relay server-select GROUP-NAME
```

---

## Configure interface type

DHCP relay vpn interface type

Attribute Name: interface-type

Attribute Type: enum (l3vpn|evpn)

Attribute Name: interface-direction

Attribute Type: enum (uplink|downlink)

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ipv4-vpn-links>
          <ipv4-vpn-link> <!-- operation="delete"-->
            <interface-type>l3vpn</interface-type>
            <config>
              <interface-type>l3vpn</interface-type>
              <interface-direction>uplink</interface-direction>
            </config>
          </ipv4-vpn-link>
        </ipv4-vpn-links>
      </vrf>
    </vrfs>
  </relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay (uplink|downlink) (l3vpn|evpn)
```

---

## Configure interface type v6

DHCPv6 relay vpn interface type

Attribute Name: interface-type-v6

Attribute Type: enum (l3vpn|evpn)

Attribute Name: interface-direction-v6

Attribute Type: enum (uplink|downlink)

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
```

```

<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <ipv6-vpn-links>
    <ipv6-vpn-link> <!-- operation="delete"-->
      <interface-type-v6>l3vpn</interface-type-v6>
      <config>
        <interface-type-v6>l3vpn</interface-type-v6>
        <interface-direction-v6>uplink</interface-direction-v6>
      </config>
    </ipv6-vpn-link>
  </ipv6-vpn-links>
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
ipv6 dhcp relay (uplink|downlink) (l3vpn|evpn)
```

---

## Configure link selection source ip

Enable link selection sub-option (5) in the option-82 in DHCP packet

Attribute Name: link-selection-source-ip

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <link-selection-source-ip>A.B.C.D</link-selection-source-ip> <!--
operation="delete"-->
      </vrf>
    </vrfs>
  </relay>
</dhcp>

```

### Command Syntax

```
ip dhcp relay information source-ip A.B.C.D
```

---

## Configure enable option82

Enable the device to insert and remove option-82 information on DHCP packets forwarded by the DHCP relay agent.

Attribute Name: enable-option82

Attribute Type: uint8

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        </enable-option82><!-- operation="delete"-->
      </vrf>
    </vrfs>
  </relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay information option
```

---

## Configure ip address

IPv4 address of the DHCP server

Attribute Name: ip-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ipv4-dhcp-servers>
          <ipv4-dhcp-server> <!-- operation="delete"-->
            <ip-address>A.B.C.D</ip-address>
            <config>
              <ip-address>A.B.C.D</ip-address>
            </config>
          </ipv4-dhcp-server>
        </ipv4-dhcp-servers>
      </vrf>
```

```

</vrfs>
</relay>
</dhcp>

```

## Command Syntax

```
ip dhcp relay address A.B.C.D
```

---

## Configure dhcpv4 server global vrf

This attributes defines the VRF in which the DHCPv4 relay server is present

Attribute Name: dhcpv4-server-global-vrf

Attribute Type: string

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ipv4-dhcp-servers>
          <ipv4-dhcp-server>
            <ip-address>A.B.C.D</ip-address>
            <config>
              <ip-address>A.B.C.D</ip-address>
            </config>
            <dhcpv4-server-global-vrf>VRF-NAME</dhcpv4-server-global-vrf> <!--
operation="delete"-->
          </ipv4-dhcp-server>
        </ipv4-dhcp-servers>
      </vrf>
    </vrfs>
  </relay>
</dhcp>

```

## Command Syntax

```
ip dhcp relay address A.B.C.D global (VRF-NAME|)
```

---

## Configure vrf name

This attributes defines the VRF in which the DHCPv4 relay server is present

Attribute Name: dhcpv4-server-global-vrf

Attribute Type: string

## Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
```

```

<relay>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <ipv4-dhcp-servers>
  <ipv4-dhcp-server>
    <ip-address>A.B.C.D</ip-address>
    <config>
      <ip-address>A.B.C.D</ip-address>
    </config>
    <dhcpv4-server-global-vrf>VRF-NAME</dhcpv4-server-global-vrf> <!--
operation="delete"-->
  </ipv4-dhcp-server>
</ipv4-dhcp-servers>
</vrf>
</vrfs>
</relay>
</dhcp>

```

## Command Syntax

```
ip dhcp relay address A.B.C.D global (VRF-NAME|)
```

---

## Configure ipv6 address

IPv6 address of the DHCP server

Attribute Name: ipv6-address

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
<relay>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <ipv6-dhcp-servers>
  <ipv6-dhcp-server> <!-- operation="delete"-->
    <ipv6-address>X:X::X:X</ipv6-address>
    <config>
      <ipv6-address>X:X::X:X</ipv6-address>
    </config>
  </ipv6-dhcp-server>
</ipv6-dhcp-servers>
</vrf>

```

```

</vrfs>
</relay>
</dhcp>

```

## Command Syntax

```
ipv6 dhcp relay address X:X::X:X
```

---

## Configure dhcpv6 server global vrf

This attributes defines the VRF in which the DHCPv6 relay server is present

Attribute Name: dhcpv6-server-global-vrf

Attribute Type: string

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ipv6-dhcp-servers>
          <ipv6-dhcp-server>
            <ipv6-address>X:X::X:X</ipv6-address>
            <config>
              <ipv6-address>X:X::X:X</ipv6-address>
            </config>
            <dhcpv6-server-global-vrf>VRF-NAME</dhcpv6-server-global-vrf> <!--
operation="delete"-->
          </ipv6-dhcp-server>
        </ipv6-dhcp-servers>
      </vrf>
    </vrfs>
  </relay>
</dhcp>

```

## Command Syntax

```
ipv6 dhcp relay address X:X::X:X global (VRF-NAME|)
```

---

## Configure enable dhcpv6 pd route injection

Enable the route installation from the prefixes learned through prefix delegation.

Attribute Name: enable-dhcpv6-pd-route-injection

Attribute Type: uint8

## Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
```

```

<relay>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  </enable-dhcpv6-pd-route-injection><!-- operation="delete"-->
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
ipv6 dhcp relay pd-route-injection
```

---

## Configure remote id

Remote host identifier. Use option 82 to provide the DHCP server information about the DHCP client

Attribute Name: remote-id

Attribute Type: union

Attribute Name: enable-option82

Attribute Type: empty

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
<relay>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
    </enable-option82><!-- operation="delete"-->
  </config>
  <remote-id>WORD</remote-id> <!-- operation="delete"-->
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
ip dhcp relay information option remote-id WORD
```

---

## Configure enable option82 always on

Keep option-82 information on DHCP packets forwarded by the DHCP relay agent.

Attribute Name: enable-option82-always-on



Attribute Type: uint8

Attribute Name: enable-option82

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </enable-option82><!-- operation="delete"-->
        </config>
        </enable-option82-always-on><!-- operation="delete"-->
      </vrf>
    </vrfs>
  </relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay information option always-on
```

---

## Configure subscriber id

Subscriber identifier. Use this option to allows the service provider to assign/activate subscriber-specific actions

Attribute Name: subscriber-id

Attribute Type: string

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
          </config>
          <subscriber-id>WORD</subscriber-id> <!-- operation="delete"-->
        </vrf>
      </vrfs>
    </relay>
  </dhcp>
```

### Command Syntax

```
ipv6 dhcp relay information option subscriber-id WORD
```

---

## Configure group6 name

IPv6 DHCP Relay group name

Attribute Name: group6-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <dhcpv6-groups>
          <dhcpv6-group> <!-- operation="delete"-->
            <group6-name>GROUP-NAME</group6-name>
            <config>
              <group6-name>WORD</group6-name>
            </config>
          </dhcpv6-group>
        </dhcpv6-groups>
      </vrf>
    </vrfs>
  </relay>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp relay server-group GROUP-NAME
```

---

## Configure group name

IPv4 DHCP Relay group name

Attribute Name: group-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
      </vrf>
    </vrfs>
  </relay>
</dhcp>
```

```

</config>
<dhcp-groups>
<dhcp-group> <!-- operation="delete"-->
  <group-name>GROUP-NAME</group-name>
  <config>
    <group-name>WORD</group-name>
  </config>
</dhcp-group>
</dhcp-groups>
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
ip dhcp relay server-group GROUP-NAME
```

---

## Configure enable dhcpv6 duplicate clients

Specify that the DHCPv6 relay agent uses the clients incoming interfaces to differentiate between the duplicate DUIDs.

Attribute Name: enable-dhcpv6-duplicate-clients

Attribute Type: empty

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
<relay>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  </enable-dhcpv6-duplicate-clients><!-- operation="delete"-->
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
ipv6 dhcp relay duplicate-clients
```

---

## Configure interface direction

DHCP relay vpn interface type

Attribute Name: interface-type

Attribute Type: enum (l3vpn|evpn)

Attribute Name: interface-direction

Attribute Type: enum (uplink|downlink)

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ipv4-vpn-links>
          <ipv4-vpn-link>
            <interface-type>l3vpn</interface-type>
            <config>
              <interface-type>l3vpn</interface-type>
              <interface-direction>uplink</interface-direction>
            </config>
          </ipv4-vpn-link>
        </ipv4-vpn-links>
      </vrf>
    </vrfs>
  </relay>
</dhcp>
```

### Command Syntax

```
ip dhcp relay (uplink|downlink) (l3vpn|evpn)
```

---

## Configure interface direction v6

DHCPv6 relay vpn interface type

This command is supported when following feature are enabled IPV6 feature

Attribute Name: interface-type-v6

Attribute Type: enum (l3vpn|evpn)

Attribute Name: interface-direction-v6

Attribute Type: enum (uplink|downlink)

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <relay>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>NAME</vrf-name>
        </config>
        <ipv6-vpn-links>
          <ipv6-vpn-link>
```

```

    <interface-type-v6>l3vpn</interface-type-v6>
    <config>
        <interface-type-v6>l3vpn</interface-type-v6>
        <interface-direction-v6>uplink</interface-direction-v6>
    </config>
</ipv6-vpn-link>
</ipv6-vpn-links>
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
ipv6 dhcp relay (uplink|downlink) (l3vpn|evpn)
```

---

## Configure server

IPv4 DHCP Relay Group server details

Attribute Name: server

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
<relay>
<vrfs>
<vrf>
    <vrf-name>WORD</vrf-name>
    <config>
        <vrf-name>NAME</vrf-name>
    </config>
    <dhcp-groups>
    <dhcp-group>
        <group-name>GROUP-NAME</group-name>
        <config>
            <group-name>WORD</group-name>
        </config>
        <server>A.B.C.D</server> <!-- operation="delete"-->
    </dhcp-group>
</dhcp-groups>
</vrf>
</vrfs>
</relay>
</dhcp>

```

### Command Syntax

```
server A.B.C.D
```

---

## clear ip dhcp relay statistics

### Netconf RPC payload

```
<ipi-dhcp-relay_clear-relay-stats xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-dhcp"/>
```

### Command Syntax

```
clear ip dhcp relay statistics
```

---

## clear ip dhcp relay option statistics

### Netconf RPC payload

```
<ipi-dhcp-relay_clear-relay-option-stats xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-dhcp"/>
```

### Command Syntax

```
clear ip dhcp relay option statistics
```

---

## clear ipv6 dhcp pd-route (vrf NAME|)

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<ipi-dhcp-relay_clear-dhcpv6-pd-route xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-dhcp">
  <vrf-name>NAME</vrf-name>
</ipi-dhcp-relay_clear-dhcpv6-pd-route>
```

### Command Syntax

```
clear ipv6 dhcp pd-route (vrf NAME|)
```

---

## IPI-DNS-RELAY

---

### Configure enable dns feature

Use this attribute to enable the DNS relay agent feature.

Attribute Name: enable-dns-feature

Attribute Type: boolean

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <config>
    <enable-dns-feature>true</enable-dns-feature> <!-- operation="delete"-->
  </config>
```

```
</dns-relay>
```

## Command Syntax

```
feature dns relay
```

---

## Configure enable dnsv4 relay

Use this attribute to enable the IPv4 DNS relay agent.

Attribute Name: enable-dnsv4-relay

Attribute Type: boolean

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <config>
    <enable-dnsv4-relay>true</enable-dnsv4-relay> <!-- operation="delete"-->
  </config>
</dns-relay>
```

## Command Syntax

```
ip dns relay
```

---

## Configure enable dnsv6 relay

Use this attribute to enable the IPv6 DNS relay agent.

Attribute Name: enable-dnsv6-relay

Attribute Type: boolean

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <config>
    <enable-dnsv6-relay>true</enable-dnsv6-relay> <!-- operation="delete"-->
  </config>
</dns-relay>
```

## Command Syntax

```
ipv6 dns relay
```

---

## Configure dns server v4 addr

Use this attribute to set the IPv4 address

Attribute Name: dns-server-v4-addr

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <config>
    <dns-server-v4-addr>A.B.C.D</dns-server-v4-addr> <!-- operation="delete"-->
  </config>
</dns-relay>
```

```
</config>
</dns-relay>
```

## Command Syntax

```
ip dns relay address A.B.C.D
```

---

## Configure dns server v6 addr

Use this attribute to set the IPv6 address

Attribute Name: dns-server-v6-addr

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
<config>
  <dns-server-v6-addr>X:X::X:X</dns-server-v6-addr> <!-- operation="delete"-->
</config>
</dns-relay>
```

## Command Syntax

```
ipv6 dns relay address X:X::X:X
```

---

## Configure name

Use this attribute to enable the IPv4 DNS relay agent.

Attribute Name: enable-dnsv4-relay

Attribute Type: empty

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </enable-dnsv4-relay><!-- operation="delete"-->
</interface>
</interfaces>
</dns-relay>
```

## Command Syntax

```
ip dns relay
```

---

## Configure dns relay uplink

Use this attribute to set the uplink IPv4 DNS relay agent.



Attribute Name: dns-relay-uplink

Attribute Type: empty

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </dns-relay-uplink><!-- operation="delete"-->
    </interface>
  </interfaces>
</dns-relay>
```

### Command Syntax

```
ip dns relay uplink
```

---

## Configure dns relay v6 uplink

Use this attribute to set the uplink IPv6 DNS relay agent.

Attribute Name: dns-relay-v6-uplink

Attribute Type: empty

### Netconf edit-config payload

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </dns-relay-v6-uplink><!-- operation="delete"-->
    </interface>
  </interfaces>
</dns-relay>
```

### Command Syntax

```
ipv6 dns relay uplink
```

---

## Configure vrf name

Use this attribute to set the IPv4 address

This command is supported when following feature are enabled Virtual routing and forwarding

Attribute Name: dns-server-v4-addr

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```
<dns-relay xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-relay">
  <vrfs>
    <vrf>
      <vrf-name>WORD</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
      </config>
      <dns-server-v4-addr>A.B.C.D</dns-server-v4-addr> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</dns-relay>
```

**Command Syntax**

```
ip dns relay address A.B.C.D
```

---

**IPI-DNS-CLIENT**

---

**Configure default domain name**

Default domain name used to complete unqualified host names (names without a dotted-decimal domain name).

Attribute Name: default-domain-name

Attribute Type: inet:domain-name

**Netconf edit-config payload**

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <default-domain-name>DOMAIN-NAME</default-domain-name> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</dns>
```

**Command Syntax**

```
ip domain-name (vrf (NAME|management) |) DOMAIN-NAME
```

---

**Configure lookup enabled**

Enable DNS translation.

Attribute Name: lookup-enabled

Attribute Type: boolean

**Netconf edit-config payload**

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <lookup-enabled>true</lookup-enabled> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</dns>
```

**Command Syntax**

```
ip domain-lookup (vrf (NAME|management) |)
```

---

**Configure vrf name**

Enable DNS translation.

Attribute Name: lookup-enabled

Attribute Type: boolean

**Netconf edit-config payload**

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <lookup-enabled>true</lookup-enabled> <!-- operation="delete"-->
    </vrf>
  </vrfs>
</dns>
```

**Command Syntax**

```
no ip domain-lookup (vrf (NAME|management) |)
```

---

**Configure address**

Name server address used for name resolution.

Attribute Name: address

Attribute Type: inet:ip-address

**Netconf edit-config payload**

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <vrfs>
    <vrf>
```

```

    <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
</servers>
<server> <!-- operation="delete"-->
  <address>CML_IP_ADDR_T</address>
  <config>
    <address>CML_IP_ADDR_T</address>
  </config>
</server>
</servers>
</vrf>
</vrfs>
</dns>

```

## Command Syntax

```
ip name-server (vrf (NAME|management) |) (A.B.C.D|X:X::X:X)
```

---

## Configure domain name

Use this attribute to define a list of default domain names used to complete unqualified host names. Each domain in the list is to be tried in turn. The ip domain-list command is similar to the ip domain-name command, except that with the ip domain-list command you can define a list of domains, each to be tried in turn. If there is no domain list, the default domain name specified with the ip domain-name command is used. If there is a domain list, the default domain name is not used.

Attribute Name: domain-name

Attribute Type: inet:domain-name

## Netconf edit-config payload

```

<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <search-domains>
    <search-domain> <!-- operation="delete"-->
      <domain-name>DOMAIN-NAME</domain-name>
      <config>
        <domain-name>CML_DOMAIN_NAME_T</domain-name>
      </config>
    </search-domain>
  </search-domains>
</dns>

```

## Command Syntax

```
ip domain-list (vrf (NAME|management)|) DOMAIN-NAME
```

---

## Configure ipv6 address

Configure a static hostname-to-address IPv6 mapping in DNS.

Attribute Name: ipv6-address

Attribute Type: inet:ipv6-address

Attribute Name: ipv4-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <host-entries>
    <host-entry>
      <hostname>HOSTNAME</hostname>
      <config>
        <hostname>1</hostname>
        <ipv4-address>A.B.C.D</ipv4-address> <!-- operation="delete"-->
        <ipv6-address>X:X::X:X</ipv6-address> <!-- operation="delete"-->
      </config>
    </host-entry>
  </host-entries>
</dns>
```

## Command Syntax

```
ip host (vrf (NAME|management)|) HOSTNAME A.B.C.D X:X::X:X
```

---

## Configure ipv4 address

Configure a static hostname-to-address IPv4 mapping in DNS.

Attribute Name: ipv4-address

Attribute Type: inet:ipv4-address

Attribute Name: ipv6-address

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
```

```

<vrfs>
<vrf>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
</vrf>
</vrfs>
<host-entries>
<host-entry>
  <hostname>HOSTNAME</hostname>
  <config>
    <hostname>1</hostname>
    <ipv6-address>X:X::X:X</ipv6-address> <!-- operation="delete"-->
  </config>
  <ipv4-address>A.B.C.D</ipv4-address> <!-- operation="delete"-->
</host-entry>
</host-entries>
</vrf>
</vrfs>
</dns>

```

## Command Syntax

```
ip host (vrf (NAME|management) |) HOSTNAME X:X::X:X A.B.C.D
```

## Configure hostname

Configure a static hostname-to-address IPv4 mapping in DNS.

Attribute Name: ipv4-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
<vrfs>
<vrf>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
</vrf>
</vrfs>
<host-entries>
<host-entry>
  <hostname>HOSTNAME</hostname>
  <config>
    <hostname>1</hostname>
    <ipv4-address>A.B.C.D</ipv4-address> <!-- operation="delete"-->
  </config>
</host-entry>
</host-entries>
</vrf>
</vrfs>
</dns>

```

---

## Command Syntax

```
ip host (vrf (NAME|management)) HOSTNAME A.B.C.D
```

---

## Configure enable

DNS client debug.

Attribute Name: enable

Attribute Type: uint8

### Netconf edit-config payload

```
<dns xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dns-client">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</dns>
```

## Command Syntax

```
debug dns client
```

---

## debug dns client

### Netconf RPC payload

```
<dns-client-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
dns-client"/>
```

## Command Syntax

```
debug dns client
```

---

## no debug dns client

### Netconf RPC payload

```
<dns-client-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
dns-client"/>
```

## Command Syntax

```
no debug dns client
```

---

# IPI-DHCP-CLIENT

---

## Configure request ipv4 dns

Use this attribute to to add an option to a DHCP request.

Attribute Name: request-ipv4-dns

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ipv4-dns><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ip dhcp client request dns-nameserver
```

---

## Configure request log server

Use this attribute to to add an option to a DHCP request.

Attribute Name: request-log-server

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-log-server><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ip dhcp client request log-server
```

---

## Configure request host name

Use this attribute to to add an option to a DHCP request.



Attribute Name: request-host-name

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-host-name><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ip dhcp client request host-name
```

---

## Configure request ntp server

Use this attribute to to add an option to a DHCP request.

Attribute Name: request-ntp-server

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ntp-server><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ip dhcp client request ntp-server
```

---

## Configure request ipv6 dns

Use this attribute to to add an option to a DHCP request.

Attribute Name: request-ipv6-dns

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ipv6-dns><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp client request dns-nameserver
```

---

## Configure request ipv6 domain list

Use this attribute to specifies a search list of Domain Names to be used by the client to locate not-fully-qualified domain names.

Attribute Name: request-ipv6-domain-list

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ipv6-domain-list><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp client request domain-search
```

---

## Configure request ipv6 ntp server

Use this attribute to specifies a list of local NTP servers available for the client to synchronize their clocks.

Attribute Name: request-ipv6-ntp-server

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ipv6-ntp-server><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp client request ntp-server
```

---

## Configure request ipv6 rapid commit

Use this attribute to indicate the clients to enter into rapid-commit with the server.

Attribute Name: request-ipv6-rapid-commit

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ipv6-rapid-commit><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp client request rapid-commit
```

---

## Configure request ipv6 vendor opts

Use this attribute to specify a 32-bit Enterprise-ID number.

Attribute Name: request-ipv6-vendor-opts

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </request-ipv6-vendor-opts><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp client request vendor-specific-information
```

---

## Configure ipv6 information request

Use this attribute to get only stateless configuration parameters (i.e., without address).

Attribute Name: ipv6-information-request

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </ipv6-information-request><!-- operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp client information-request
```

---

## Configure ipv6 dad wait time

Use this attribute to Specify maximum time (in seconds) that the client should wait for the duplicate address detection (DAD) to complete on an interface.

Attribute Name: ipv6-dad-wait-time

Attribute Type: uint16

Attribute Range: 1-600

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
          <ipv6-dad-wait-time>1</ipv6-dad-wait-time> <!-- operation="delete"-->
        </interface>
      </interfaces>
    </client>
  </dhcp>
```

### Command Syntax

```
ipv6 dhcp client dad-wait-time <1-600>
```

---

## Configure ipv6 client duid type

Use this attribute to configure duid type(II or IIt).

Attribute Name: ipv6-client-duid-type

Attribute Type: enum (II|IIt)

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
          <ipv6-client-duid-type>II</ipv6-client-duid-type> <!-- operation="delete"-->
        </interface>
      </interfaces>
    </client>
  </dhcp>
```

## Command Syntax

```
ipv6 dhcp client duid (ll|llt)
```

---

## Configure ipv6 max delegated prefix

Use this attribute to configure the maximum number of simultaneous prefixes delegated to a single client

Attribute Name: ipv6-max-delegated-prefix

Attribute Type: uint16

Attribute Range: 1-64

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <ipv6-max-delegated-prefix>1</ipv6-max-delegated-prefix> <!--
operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

## Command Syntax

```
ipv6 dhcp client max-delegated-prefixes <1-64>
```

---

## Configure request ipv6 prefix

Use this attribute to add an option to a DHCP request.

Attribute Name: request-ipv6-prefix

Attribute Type: string

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <request-ipv6-prefix>PREFIX-NAME</request-ipv6-prefix> <!--
operation="delete"-->
      </interface>
    </interfaces>
  </client>
</dhcp>
```

```
</client>
</dhcp>
```

## Command Syntax

```
ipv6 dhcp prefix-delegation PREFIX-NAME
```

---

## Configure suffix ipv6 addr

This attribute points to IPv6 address

This command is supported when following feature are enabled IPV6 feature

Attribute Name: suffix-ipv6-addr

Attribute Type: string

## Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <client>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <prefix-ipv6-addresses>
          <prefix-ipv6-address> <!-- operation="delete"-->
            <suffix-ipv6-addr>X:X::X:X/M</suffix-ipv6-addr>
            <config>
              <suffix-ipv6-addr>X:X::X:X/M</suffix-ipv6-addr>
              <prefix-name>PREFIX-NAME</prefix-name>
            </config>
            <prefix-name>PREFIX-NAME</prefix-name>
          </prefix-ipv6-address>
        </prefix-ipv6-addresses>
      </interface>
    </interfaces>
  </client>
</dhcp>
```

## Command Syntax

```
ipv6 address PREFIX-NAME X:X::X:X/M
```

---

# IPI-DHCP-SERVER

---

## Configure enable ipv4 server

Interface on which IPv4 DHCP Server has to be run

Attribute Name: enable-ipv4-server

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </enable-ipv4-server><!-- operation="delete"-->
    </interface>
  </interfaces>
</server>
</dhcp>
```

### Command Syntax

```
ip dhcp server
```

---

## Configure enable ipv6 server

Interface on which IPv6 DHCP Server has to be run

Attribute Name: enable-ipv6-server

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
      </enable-ipv6-server><!-- operation="delete"-->
    </interface>
  </interfaces>
</server>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp server
```

---

## Configure pool6 name

IPv6 DHCP Server address pool name

Attribute Name: pool6-name



Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp6-pools>
          <dhcp6-pool> <!-- operation="delete"-->
            <pool6-name>NAME</pool6-name>
            <config>
              <pool6-name>WORD</pool6-name>
            </config>
          </dhcp6-pool>
        </dhcp6-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

### Command Syntax

```
ipv6 dhcp server pool NAME
```

---

## Configure pool name

IPv4 DHCP Server address pool name

Attribute Name: pool-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool> <!-- operation="delete"-->
            <pool-name>NAME</pool-name>
            <config>
```

```

        <pool-name>WORD</pool-name>
    </config>
</dhcp-pool>
</dhcp-pools>
</vrf>
</vrfs>
</server>
</dhcp>

```

## Command Syntax

```
ip dhcp server pool NAME
```

---

## Configure max lease time

Maximum length in seconds that will be assigned to a lease. If not defined, the default maximum lease time is 86400.

Attribute Name: max-lease-time

Attribute Type: int32

Default Value: 86400

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
          </config>
          <max-lease-time>SECONDS</max-lease-time> <!-- operation="delete"-->
        </vrf>
      </vrfs>
    </server>
  </dhcp>

```

## Command Syntax

```
ip dhcp server max-lease-time SECONDS
```

---

## Configure default lease time

Length in seconds that will be assigned to a lease if the client requesting the lease does not ask for a specific expiration time. The default is 86400

Attribute Name: default-lease-time

Attribute Type: int32

Default Value: 86400

## Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
```

```

<server>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  <default-lease-time>SECONDS</default-lease-time> <!-- operation="delete"-->
</vrf>
</vrfs>
</server>
</dhcp>

```

### Command Syntax

```
ip dhcp server default-lease-time SECONDS
```

---

## Configure rapid commit

Option enables the DHCP Client to obtain configuration parameters from the server through a rapid two message exchange (solicit and reply).

Attribute Name: rapid-commit

Attribute Type: empty

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
<server>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  </rapid-commit><!-- operation="delete"-->
</vrf>
</vrfs>
</server>
</dhcp>

```

### Command Syntax

```
ipv6 dhcp server rapid-commit
```

---

## Configure preference

Use this to configure preference option in dhcp server.

Attribute Name: preference

Attribute Type: empty

**Netconf edit-config payload**

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        </preference><!-- operation="delete"-->
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

**Command Syntax**

```
ipv6 dhcp server preference
```

---

**Configure vrf name**

Option enables the DHCP Client to obtain configuration parameters from the server through a rapid two message exchange (solicit and reply).

Attribute Name: rapid-commit

Attribute Type: empty

**Netconf edit-config payload**

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        </rapid-commit><!-- operation="delete"-->
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

**Command Syntax**

```
ipv6 dhcp server rapid-commit
```

---

**Configure host name**

IPv4 DHCP Server option to provide hostname details to a DHCP client

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
            <host-name>NAME</host-name> <!-- operation="delete"-->
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

### Command Syntax

host-name NAME

---

## Configure routers

IPv4 DHCP Server option to provide routers details to a DHCP client

Attribute Name: routers

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

```

        </routers>A.B.C.D</routers> <!-- operation="delete"-->
    </dhcp-pool>
</dhcp-pools>
</vrf>
</vrfs>
</server>
</dhcp>

```

## Command Syntax

```

routers A.B.C.D

```

---

## Configure ntp server

IPv4 DHCP Server option to provide ntp-server details to a DHCP client

Attribute Name: ntp-server

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
            <ntp-server>A.B.C.D</ntp-server> <!-- operation="delete"-->
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>

```

## Command Syntax

```

ntp-server A.B.C.D

```

---

## Configure boot file

IPv4 DHCP Server option to provide boot-file details to a DHCP client

Attribute Name: boot-file

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
            <boot-file>BOOTFILE</boot-file> <!-- operation="delete"-->
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

### Command Syntax

```
boot-file BOOTFILE
```

---

## Configure tftp server

IPv4 DHCP Server option to provide tftp-server details to a DHCP client

Attribute Name: tftp-server

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

```

        <tftp-server>A.B.C.D</tftp-server> <!-- operation="delete"-->
    </dhcp-pool>
</dhcp-pools>
</vrf>
</vrfs>
</server>
</dhcp>

```

### Command Syntax

```
tftp-server A.B.C.D
```

---

## Configure log server

IPv4 DHCP Server option to provide log-server details to a DHCP client

Attribute Name: log-server

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
            <log-server>A.B.C.D</log-server> <!-- operation="delete"-->
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>

```

### Command Syntax

```
log-server A.B.C.D
```

---

## Configure dns server

IPv4 DHCP Server option to provide dns name-server details to a DHCP client

Attribute Name: dns-server

Attribute Type: inet:ipv4-address



**Netconf edit-config payload**

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
            <dns-server>A.B.C.D</dns-server> <!-- operation="delete"-->
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>

```

**Command Syntax**

```
dns-server A.B.C.D
```

---

**Configure netmask**

Mask part of the subnet that will be used to assign IPv4 addresses to hosts

Attribute Name: netmask

Attribute Type: inet:ipv4-address

Attribute Name: network

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
            </config>
          </dhcp-pool>
        </dhcp-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>

```

```

        <network>A.B.C.D</network> <!-- operation="delete"-->
    </config>
        <netmask>A.B.C.D</netmask> <!-- operation="delete"-->
    </dhcp-pool>
</dhcp-pools>
</vrf>
</vrfs>
</server>
</dhcp>

```

## Command Syntax

```
network A.B.C.D netmask A.B.C.D
```

---

## Configure high address in range

Specifies the high range of the IPv4 addresses that the DHCP server should assign to DHCP clients.

Attribute Name: high-address-in-range

Attribute Type: inet:ipv4-address

Attribute Name: low-address-in-range

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp-pools>
          <dhcp-pool>
            <pool-name>NAME</pool-name>
            <config>
              <pool-name>WORD</pool-name>
              <low-address-in-range>A.B.C.D</low-address-in-range> <!--
operation="delete"-->
            </config>
              <high-address-in-range>A.B.C.D</high-address-in-range> <!--
operation="delete"-->
            </dhcp-pool>
          </dhcp-pools>
        </vrf>
      </vrfs>
    </server>
  </dhcp>

```

## Command Syntax

```
address range low-address A.B.C.D (high-address A.B.C.D|)
```

---

## Configure domain name

IPv6 DHCP Server option to provide domain-name details to a DHCP client

This command is supported when following feature are enabled IPV6 feature

Attribute Name: domain-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp6-pools>
          <dhcp6-pool>
            <pool6-name>NAME</pool6-name>
            <config>
              <pool6-name>WORD</pool6-name>
            </config>
            <domain-name>NAME</domain-name> <!-- operation="delete"-->
          </dhcp6-pool>
        </dhcp6-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

### Command Syntax

```
domain-name NAME
```

---

## Configure vendor options

IPv6 DHCP Server option to provide vendor details to a DHCP client

This command is supported when following feature are enabled IPV6 feature

Attribute Name: vendor-options

Attribute Type: string

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
```

```

<config>
  <vrf-name>WORD</vrf-name>
</config>
<dhcp6-pools>
<dhcp6-pool>
  <pool6-name>NAME</pool6-name>
  <config>
    <pool6-name>WORD</pool6-name>
  </config>
  <vendor-options>VENDOR-OPTS</vendor-options> <!-- operation="delete"-->
</dhcp6-pool>
</dhcp6-pools>
</vrf>
</vrfs>
</server>
</dhcp>

```

## Command Syntax

```
vendor-options VENDOR-OPTS
```

---

## Configure ipv6 netmask

Mask part of the subnet that will be used to assign IPv6 addresses to hosts

This command is supported when following feature are enabled IPV6 feature

Attribute Name: ipv6-netmask

Attribute Type: uint8

Attribute Range: 1-128

Attribute Name: ipv6-network

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
<server>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  <dhcp6-pools>
  <dhcp6-pool>
    <pool6-name>NAME</pool6-name>
    <config>
      <pool6-name>WORD</pool6-name>
      <ipv6-network>X:X::X:X</ipv6-network> <!-- operation="delete"-->
    </config>
    <ipv6-netmask>1</ipv6-netmask> <!-- operation="delete"-->
  </dhcp6-pool>

```

```

</dhcp6-pools>
</vrf>
</vrfs>
</server>
</dhcp>

```

## Command Syntax

```
network X:X::X:X netmask <1-128>
```

---

## Configure low address in range

Specifies the high range of the IPv6 addresses that the DHCP server should assign to DHCP clients.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: high-address-in-range

Attribute Type: inet:ipv6-address

Attribute Name: low-address-in-range

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp6-pools>
          <dhcp6-pool>
            <pool6-name>NAME</pool6-name>
            <config>
              <pool6-name>WORD</pool6-name>
              <low-address-in-range>X:X::X:X</low-address-in-range> <!--
operation="delete"-->
            </config>
              <high-address-in-range>X:X::X:X</high-address-in-range> <!--
operation="delete"-->
            </dhcp6-pool>
          </dhcp6-pools>
        </vrf>
      </vrfs>
    </server>
  </dhcp>

```

## Command Syntax

```
address range low-address X:X::X:X (high-address X:X::X:X|)
```

---

## Configure temporary address

Specifies the temporary IPv6 address that the DHCP server should assign to DHCP clients.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: temporary-address

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp6-pools>
          <dhcp6-pool>
            <pool6-name>NAME</pool6-name>
            <config>
              <pool6-name>WORD</pool6-name>
            </config>
            <temporary-address>X:X::X:X</temporary-address> <!-- operation="delete"-->
          </dhcp6-pool>
        </dhcp6-pools>
      </vrf>
    </vrfs>
  </server>
</dhcp>
```

### Command Syntax

```
temporary address X:X::X:X
```

---

## Configure ipv6 prefix netmask

Mask part of the ipv6 Prefix used for Prefix delegation

This command is supported when following feature are enabled IPV6 feature

Attribute Name: ipv6-prefix-netmask

Attribute Type: uint8

Attribute Range: 1-128

Attribute Name: ipv6-prefix-high-address

Attribute Type: inet:ipv6-address

Attribute Name: ipv6-prefix-low-address

Attribute Type: inet:ipv6-address

**Netconf edit-config payload**

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <server>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <dhcp6-pools>
          <dhcp6-pool>
            <pool6-name>NAME</pool6-name>
            <config>
              <pool6-name>WORD</pool6-name>
              <ipv6-prefix-high-address>X:X::X:X</ipv6-prefix-high-address> <!--
operation="delete"-->
              <ipv6-prefix-low-address>X:X::X:X</ipv6-prefix-low-address> <!--
operation="delete"-->
              </config>
              <ipv6-prefix-netmask>1</ipv6-prefix-netmask> <!-- operation="delete"-->
            </dhcp6-pool>
          </dhcp6-pools>
        </vrf>
      </vrfs>
    </server>
  </dhcp>

```

**Command Syntax**

```
prefix high-range X:X::X:X low-range X:X::X:X netmask <1-128>
```

---

**IPI-SFLOW**

---

**Configure enabled**

Use this attribute to enable or disable Sampled Flow (sFlow) feature globally.

Attribute Name: enabled

Attribute Type: empty

**Netconf edit-config payload**

```

<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <config>
      </enabled>
    </config>
  </sflow>
</sampling>

```

---

## Command Syntax

```
feature sflow
```

---

## Configure source address

The IP address associated with this agent. In the case of a multi-homed agent, this should be the loopback address of the agent. The sFlowAgent address must provide SNMP connectivity to the agent. The address should be an invariant that does not change as interfaces are reconfigured, enabled, disabled, added or removed. A manager should be able to use the sFlowAgentAddress as a unique key that will identify this agent over extended periods of time so that a history can be maintained.

Attribute Name: source-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <config>
      <source-address>A.B.C.D</source-address> <!-- operation="delete"-->
    </config>
  </sflow>
</sampling>
```

## Command Syntax

```
sflow agent-ip A.B.C.D
```

---

## Configure cpu rate limit

CPU rate in packets per second

Attribute Name: cpu-rate-limit

Attribute Type: uint32

Attribute Range: 2000-100000

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <config>
      <cpu-rate-limit>2000</cpu-rate-limit> <!-- operation="delete"-->
    </config>
  </sflow>
</sampling>
```

## Command Syntax

```
sflow rate-limit <2000-100000>
```

---

## Configure vrf name

The VRF name from which this collector is reachable.



Attribute Name: vrf-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: receiver-timeout

Attribute Type: uint32

Attribute Range: 0-2147483647

Attribute Name: max-datagram-size

Attribute Type: uint16

Attribute Range: 200-9000

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <collectors>
      <collector>
        <collector-id>1</collector-id>
        <config>
          <collector-id>1</collector-id>
          <port>1024</port>
          <address>A.B.C.D</address>
          <receiver-timeout>0</receiver-timeout> <!-- operation="delete"-->
          <max-datagram-size>200</max-datagram-size> <!-- operation="delete"-->
        </config>
        <port>1024</port>
        <address>A.B.C.D</address>
        <vrf-name>WORD</vrf-name> <!-- operation="delete"-->
      </collector>
    </collectors>
  </sflow>
</sampling>
```

### Command Syntax

```
sflow (collector-id <1-5>|) collector A.B.C.D port <1024-65535> receiver-time-out
<0-2147483647> max-datagram-size <200-9000> (vrf WORD|)
```

---

## Configure max entries

Specifies the maximum number of log entries that are cached, default is 1000 entries

This command is supported when following feature are enabled custom1 access-list options

Attribute Name: max-entries

Attribute Type: uint16

Default Value: 1000

Attribute Range: 1000-10000

---

**Netconf edit-config payload**

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <logging>
      <config>
        <max-entries>1000</max-entries> <!-- operation="delete"-->
      </config>
    </logging>
  </sflow>
</sampling>
```

**Command Syntax**

```
access-list logging cache-size <1000-10000>
```

---

**Configure rate limit**

Configures rate limits in packets per second, Default is 200 packets/sec

This command is supported when following feature are enabled custom1 access-list options

Attribute Name: rate-limit

Attribute Type: uint16

Default Value: 200

Attribute Range: 0-1000

**Netconf edit-config payload**

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <logging>
      <config>
        <rate-limit>0</rate-limit> <!-- operation="delete"-->
      </config>
    </logging>
  </sflow>
</sampling>
```

**Command Syntax**

```
access-list logging rate-limit <0-1000>
```

---

**Configure options**

Set sFlow debug in config mode

Attribute Name: options

Attribute Type: bits (agent|sampling|polling|all)

**Netconf edit-config payload**

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
```

```
<debug>
<config>
  <options>agent</options> <!-- operation="delete"-->
</config>
</debug>
</sflow>
</sampling>
```

### Command Syntax

```
debug sflow (agent|sampling|polling|all)
```

---

## clear access-list log-cache

### Netconf RPC payload

```
<sflow-clear-access-list-log-cache xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-sflow"/>
```

### Command Syntax

```
clear access-list log-cache
```

---

## debug sflow (agent|sampling|polling|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (agent|sampling|polling|all)

### Netconf RPC payload

```
<sflow-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
<terminal-debug-options>agent</terminal-debug-options>
</sflow-terminal-debug-on>
```

### Command Syntax

```
debug sflow (agent|sampling|polling|all)
```

---

## no debug sflow (agent|sampling|polling|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (agent|sampling|polling|all)

### Netconf RPC payload

```
<sflow-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
sflow">
<terminal-debug-options>agent</terminal-debug-options>
</sflow-terminal-debug-off>
```

### Command Syntax

```
no debug sflow (agent|sampling|polling|all)
```

---

## IPI-SFLOW-INTERFACE

---

### Configure enabled

To enable or disable sampling on an interface after giving the sflow sampling-rate command on the same interface

Attribute Name: enabled

Attribute Type: empty

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow-interface">
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        </enabled><!-- operation="delete"-->
      </interface>
    </interfaces>
  </sflow>
</sampling>
```

### Command Syntax

```
sflow enable
```

---

### Configure polling interval

The maximum number of seconds between successive samples of the counters associated with this data source. A sampling interval of 0 disables counter sampling. The agent is permitted to have minimum and maximum allowable values for the counter polling interval. A minimum interval lets the agent designer set an upper bound on the overhead associated with polling, and a maximum interval may be the result of implementation restrictions (such as counter size). In addition, not all values between the maximum and minimum may be realizable as the sampling interval (again because of implementation considerations). When the sampling rate is set, the agent is free to adjust the value so that it lies between the maximum and minimum values and has the closest achievable value. When read, the agent must return the actual sampling interval it will be using (after the adjustments previously described). The sampling algorithm must converge so that over time the number of packets sampled approaches 1/Nth of the total number of packets in the monitored flows.

Attribute Name: polling-interval

Attribute Type: uint8

Attribute Range: 5-60

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow-interface">
```

```

    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <polling-interval>5</polling-interval> <!-- operation="delete"-->
    </interface>
  </interfaces>
</sflow>
</sampling>

```

### Command Syntax

```
sflow poll-interval <5-60>
```

---

## Configure collector id

Add a collector id to the interface so that it can be used by sflow to send the data.

Attribute Name: collector-id

Attribute Type: uint8

Default Value: 1

Attribute Range: 1-5

### Netconf edit-config payload

```

<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow-interface">
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <collector-id>1</collector-id> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </sflow>
</sampling>

```

### Command Syntax

```
sflow collector-id <1-5>
```

---

## Configure sample size

The maximum number of bytes that should be copied from a sampled packet. The agent may have an internal maximum and minimum permissible sizes. If an attempt is made to set this value outside the permissible range then the agent should adjust the value to the closest permissible value.

Attribute Name: sample-size

Attribute Type: uint16

Attribute Range: 16-256

Attribute Name: sampling-rate

Attribute Type: uint32

Attribute Range: 1024-16777215

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow-interface">
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <ingress>
          <config>
            <sampling-rate>1024</sampling-rate>
            <sample-size>16</sample-size>
          </config>
        </ingress>
      </interface>
    </interfaces>
  </sflow>
</sampling>
```

### Command Syntax

```
sflow sampling-rate <1024-16777215> direction ingress max-header-size <16-256>
```

---

## Configure name

The maximum number of bytes that should be copied from a sampled packet. The agent may have an internal maximum and minimum permissible sizes. If an attempt is made to set this value outside the permissible range then the agent should adjust the value to the closest permissible value.

Attribute Name: sample-size

Attribute Type: uint16

Attribute Range: 16-256

Attribute Name: sampling-rate

Attribute Type: uint32

Attribute Range: 1024-16777215

### Netconf edit-config payload

```
<sampling xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow">
  <sflow>
    <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow-interface">
      <interface>
        <name>WORD</name>
```

```

    <config>
      <name>WORD</name>
    </config>
  <egress>
    <config>
      <sampling-rate>1024</sampling-rate>
      <sample-size>16</sample-size>
    </config>
  </egress>
</interface>
</interfaces>
</sflow>
</sampling>

```

### Command Syntax

```
sflow sampling-rate <1024-16777215> direction egress max-header-size <16-256>
```

---

## clear sflow statistics (interface IFNAME|)

Attribute Name: interface

Attribute Type: string

### Netconf RPC payload

```

<sflow-clear-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sflow-
interface">
  <interface>IFNAME</interface>
</sflow-clear-statistics>

```

### Command Syntax

```
clear sflow statistics (interface IFNAME|)
```

---

## IPI-WATCHDOG

---

### Configure watchdog disabled

Disable software watchdog functionality for all modules. This feature is enabled by default.

Attribute Name: watchdog-disabled

Attribute Type: uint8

### Netconf edit-config payload

```

<watchdog xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-watchdog">
  <config>
    </watchdog-disabled><!-- operation="delete"-->
  </config>
</watchdog>

```

## Command Syntax

```
no feature software-watchdog
```

---

## Configure keepalive interval

Software watchdog keep-alive time interval in seconds. Default value is 60 seconds.

This command is supported when following feature are enabled Watchdog feature

Attribute Name: keepalive-interval

Attribute Type: uint16

Default Value: 60

Attribute Range: 30-1800

### Netconf edit-config payload

```
<watchdog xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-watchdog">
  <config>
    <keepalive-interval>30</keepalive-interval> <!-- operation="delete"-->
  </config>
</watchdog>
```

## Command Syntax

```
software-watchdog keep-alive-time <30-1800>
```

---

## Configure module watchdog status disabled

Enable software watchdog functionality for a particular software module.

Attribute Name: module-watchdog-status-disabled

Attribute Type: uint8

### Netconf edit-config payload

```
<watchdog xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-watchdog">
  <software-modules>
    <software-module>
      <name>nsm</name>
      <config>
        <name>nsm</name>
      </config>
      </module-watchdog-status-disabled><!-- operation="delete"-->
    </software-module>
  </software-modules>
</watchdog>
```

## Command Syntax

```
no software-watchdog
(nsm|ripd|ripngd|ospfd|ospf6d|isisd|hostpd|mribd|pimd|authd|mstpd|imi|onmd|hsl|o
amd|vlogd|vrrpd|ndd|ribd|bgpd|l2mribd|lagd|sflow|udld|cmlld|cmmd)
```



---

## clear cores (WORD|)

Attribute Name: core-dump

Attribute Type: string

### Netconf RPC payload

```
<clear-core-dump xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-watchdog">
  <core-dump>WORD</core-dump>
</clear-core-dump>
```

### Command Syntax

```
clear cores (WORD|)
```

---

## sys-update un-install

### Netconf RPC payload

```
<sys-update-uninstall xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-
update"/>
```

### Command Syntax

```
sys-update un-install
```

---

## sys-container (raon) (install|update) file FILENAME

Attribute Name: type

Attribute Type: enum (raon)

Attribute Name: upgrade-type

Attribute Type: enum (install|update)

Attribute Name: file

Attribute Type: string

### Netconf RPC payload

```
<sys-container-install xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-
update">
  <type>raon</type>
  <upgrade-type>install</upgrade-type>
  <file>FILENAME</file>
</sys-container-install>
```

### Command Syntax

```
sys-container (raon) (install|update) file FILENAME
```

---

## sys-container (raon) un-install

Attribute Name: type

Attribute Type: enum (raon)

Attribute Name: un-install

Attribute Type: boolean

Default Value: false

### Netconf RPC payload

```
<sys-container-uninstall xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-update">
  <type>raon</type>
  <un-install>true</un-install/>
</sys-container-uninstall>
```

### Command Syntax

```
sys-container (raon) un-install
```

---

## sys-container (raon) (start|stop|restart)

Attribute Name: type

Attribute Type: enum (raon)

Attribute Name: boot-type

Attribute Type: enum (start|stop|restart)

### Netconf RPC payload

```
<sys-container-boot xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-update">
  <type>raon</type>
  <boot-type>start</boot-type>
</sys-container-boot>
```

### Command Syntax

```
sys-container (raon) (start|stop|restart)
```

---

## sys-container (raon) get URL (source-interface IFNAME|)

Attribute Name: type

Attribute Type: enum (raon)

Attribute Name: url

Attribute Type: string

Attribute Name: source-interface

Attribute Type: string

### Netconf RPC payload

```
<sys-container-get xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-update">
  <type>raon</type>
  <url>URL</url>
  <source-interface>IFNAME</source-interface>
</sys-container-get>
```

---

## Command Syntax

```
sys-container (raon) get URL (source-interface IFNAME|)
```

---

## sys-container (raon) remove file FILENAME

Attribute Name: type

Attribute Type: enum (raon)

Attribute Name: file

Attribute Type: string

### Netconf RPC payload

```
<sys-container-remove xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-
update">
  <type>raon</type>
  <file>FILENAME</file>
</sys-container-remove>
```

## Command Syntax

```
sys-container (raon) remove file FILENAME
```

---

## sys-container (raon) verify image FILEPATH signature FILEPATH

Attribute Name: type

Attribute Type: enum (raon)

Attribute Name: image

Attribute Type: string

Attribute Name: signature

Attribute Type: string

### Netconf RPC payload

```
<sys-container-verify xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-sys-
update">
  <type>raon</type>
  <image>FILEPATH</image>
  <signature>FILEPATH</signature>
</sys-container-verify>
```

## Command Syntax

```
sys-container (raon) verify image FILEPATH signature FILEPATH
```

---

## sys-container cancel download

### Netconf RPC payload

```
<sys-container-cancel-download xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
sys-update"/>
```

## Command Syntax

```
sys-container cancel download
```

---

## IPI-MRIB-IPV4

---

### Configure options

Use this attribute to specify debug options

Attribute Name: options

Attribute Type: bits (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrrib-msg|mtrace|mtrace-detail)

### Netconf edit-config payload

```
<mrrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrrib">
  <ipv4>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <debug>
          <config>
            <options>all</options> <!-- operation="delete"-->
          </config>
        </debug>
      </vrf>
    </vrfs>
  </ipv4>
</mrrib>
```

## Command Syntax

```
debug ip mrrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-
msg|mrrib-msg|mtrace|mtrace-detail)
```

---

## Configure multicast routing enable

Use this attribute to turn on/off multicast routing on the router when turned off, the multicast protocol daemon remains present, but does not perform multicast functions. When multicast routing is enabled, the MRIB re-creates tunnels, and starts processing any VIF addition/deletion requests, MRT addition/deletion requests, and any multicast forwarding events.

Attribute Name: multicast-routing-enable

Attribute Type: uint8

### Netconf edit-config payload

```
<mrrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrrib">
  <ipv4>
```

```

<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  </multicast-routing-enable><!-- operation="delete"-->
</vrf>
</vrfs>
</ipv4>
</mrib>

```

### Command Syntax

```
ip multicast-routing (vrf WORD|)
```

---

## Configure maximum routes

Use this attribute to limit the number of multicast routes that can be added to a multicast routing table. It generates an error message when the limit is exceeded.

Attribute Name: maximum-routes

Attribute Type: uint32

Attribute Range: 1-2147483647

### Netconf edit-config payload

```

<mrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrib">
<ipv4>
<vrfs>
<vrf>
  <vrf-name>WORD</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  <route-limit>
    <config>
      <maximum-routes>1</maximum-routes> <!-- operation="delete"-->
    </config>
  </route-limit>
</vrf>
</vrfs>
</ipv4>
</mrib>

```

### Command Syntax

```
ip multicast (vrf WORD|) route-limit <1-2147483647>
```

---

## Configure warning threshold

Use this attribute to limit the number of multicast routes that can be added to a multicast routing table. It generates an error message when the limit is exceeded. If the threshold parameter is set, a threshold warning message is generated when this threshold is exceeded and the message continues to occur until the number of mroutes reaches the limit set by the limit argument.

Attribute Name: warning-threshold

Attribute Type: uint32

Attribute Range: 1-2147483647

Attribute Name: maximum-routes

Attribute Type: uint32

Attribute Range: 1-2147483647

### Netconf edit-config payload

```
<mrrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrrib">
  <ipv4>
    <vrfs>
      <vrf>
        <vrf-name>WORD</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <route-limit>
          <config>
            <maximum-routes>1</maximum-routes> <!-- operation="delete"-->
            <warning-threshold>1</warning-threshold> <!-- operation="delete"-->
          </config>
        </route-limit>
      </vrf>
    </vrfs>
  </ipv4>
</mrrib>
```

### Command Syntax

```
ip multicast (vrf WORD|) route-limit <1-2147483647> <1-2147483647>
```

---

## Configure ttl threshold

Use this attribute to configure the time-to-live (TTL) threshold of packets being forwarded out of an interface. Only multicast packets with a TTL value greater than the threshold are forwarded out of the interface.

Attribute Name: ttl-threshold

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<mrrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrrib">
```

```

<ipv4>
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <ttl-threshold>1</ttl-threshold> <!-- operation="delete"-->
</interface>
</interfaces>
</ipv4>
</mrib>

```

### Command Syntax

```
ip multicast ttl-threshold <1-255>
```

---

## debug ip mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

### Netconf RPC payload

```

<ipi-mrib-ipv4_mrib-ipv4-terminal-debug-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mrib">
  <vrf-name>WORD</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-mrib-ipv4_mrib-ipv4-terminal-debug-on>

```

### Command Syntax

```
debug ip mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-
msg|mrib-msg|mtrace|mtrace-detail)
```

---

## no debug ip mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

### Netconf RPC payload

```

<ipi-mrib-ipv4_mrib-ipv4-terminal-debug-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mrib">
  <vrf-name>WORD</vrf-name>

```

```
<terminal-debug-options>all</terminal-debug-options>
</ipi-mrib-ipv4_mrib-ipv4-terminal-debug-off>
```

## Command Syntax

```
no debug ip mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-
msg|mrib-msg|mtrace|mtrace-detail)
```

---

## clear ip mroute (vrf NAME|) \*

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: all-routes

Attribute Type: empty

## Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-clear-mroute-all xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <all-routes>CML_EMPTY_T</all-routes>
</ipi-mrib-ipv4_mrib-ipv4-clear-mroute-all>
```

## Command Syntax

```
clear ip mroute (vrf NAME|) *
```

---

## clear ip mroute (vrf NAME|) A.B.C.D

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv4-address

## Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-clear-mroute-group xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
</ipi-mrib-ipv4_mrib-ipv4-clear-mroute-group>
```

## Command Syntax

```
clear ip mroute (vrf NAME|) A.B.C.D
```

---

## clear ip mroute (vrf NAME|) A.B.C.D A.B.C.D

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address



Attribute Type: inet:ipv4-address

Attribute Name: source-address

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-clear-mroute-source-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
  <source-address>A.B.C.D</source-address>
</ipi-mrib-ipv4_mrib-ipv4-clear-mroute-source-group>
```

### Command Syntax

```
clear ip mroute (vrf NAME|) A.B.C.D A.B.C.D
```

---

### clear ip mroute (vrf NAME|) statistics \*

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: all-routes

Attribute Type: empty

### Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-clear-mroute-statistics-all xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <all-routes>CML_EMPTY_T</all-routes>
</ipi-mrib-ipv4_mrib-ipv4-clear-mroute-statistics-all>
```

### Command Syntax

```
clear ip mroute (vrf NAME|) statistics *
```

---

### clear ip mroute (vrf NAME|) statistics A.B.C.D

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-clear-mroute-statistics-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
</ipi-mrib-ipv4_mrib-ipv4-clear-mroute-statistics-group>
```

---

## Command Syntax

```
clear ip mroute (vrf NAME|) statistics A.B.C.D
```

---

## clear ip mroute (vrf NAME|) statistics A.B.C.D A.B.C.D

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv4-address

Attribute Name: source-address

Attribute Type: inet:ipv4-address

## Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-clear-mroute-statistics-source-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
  <source-address>A.B.C.D</source-address>
</ipi-mrib-ipv4_mrib-ipv4-clear-mroute-statistics-source-group>
```

## Command Syntax

```
clear ip mroute (vrf NAME|) statistics A.B.C.D A.B.C.D
```

---

## snmp restart mrib

## Netconf RPC payload

```
<ipi-mrib-ipv4_mrib-ipv4-snmp-restart xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-mrib"/>
```

## Command Syntax

```
snmp restart mrib
```

---

# IPI-MRIB-IPV6

---

## Configure options

Use this attribute to specify debug options

Attribute Name: options

Attribute Type: bits (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

## Netconf edit-config payload

```
<mrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <ipv6>
  <vrfs>
```

```

<vrf>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  <debug>
    <config>
      <options>all</options> <!-- operation="delete"-->
    </config>
  </debug>
</vrf>
</vrfs>
</ipv6>
</mrib>

```

## Command Syntax

```
debug ipv6 mrib (vrf NAME|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-
msg|mrib-msg|mtrace|mtrace-detail)
```

---

## Configure multicast routing enable

Use this attribute to turn on/off multicast routing on the router when turned off, the multicast protocol daemon remains present, but does not perform multicast functions. When multicast routing is enabled, the MRIB re-creates tunnels, and starts processing any VIF addition/deletion requests, MRT addition/deletion requests, and any multicast forwarding events.

Attribute Name: multicast-routing-enable

Attribute Type: uint8

## Netconf edit-config payload

```

<mrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <ipv6>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        </multicast-routing-enable><!-- operation="delete"-->
      </vrf>
    </vrfs>
  </ipv6>
</mrib>

```

## Command Syntax

```
ipv6 multicast-routing (vrf NAME|)
```

---

## Configure maximum routes

Use this attribute to limit the number of multicast routes that can be added to a multicast routing table. It generates an error message when the limit is exceeded.

Attribute Name: maximum-routes

Attribute Type: uint32

Attribute Range: 1-2147483647

### Netconf edit-config payload

```
<mrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <ipv6>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <route-limit>
          <config>
            <maximum-routes>1</maximum-routes> <!-- operation="delete"-->
          </config>
        </route-limit>
      </vrf>
    </vrfs>
  </ipv6>
</mrib>
```

### Command Syntax

```
ipv6 multicast (vrf NAME|) route-limit <1-2147483647>
```

---

## Configure warning threshold

Use this attribute to limit the number of multicast routes that can be added to a multicast routing table. It generates an error message when the limit is exceeded. If the threshold parameter is set, a threshold warning message is generated when this threshold is exceeded and the message continues to occur until the number of mroutes reaches the limit set by the limit argument.

Attribute Name: warning-threshold

Attribute Type: uint32

Attribute Range: 1-2147483647

Attribute Name: maximum-routes

Attribute Type: uint32

Attribute Range: 1-2147483647

### Netconf edit-config payload

```
<mrib xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <ipv6>
```

```

<vrfs>
<vrf>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>WORD</vrf-name>
  </config>
  <route-limit>
  <config>
    <maximum-routes>1</maximum-routes> <!-- operation="delete"-->
    <warning-threshold>1</warning-threshold> <!-- operation="delete"-->
  </config>
</route-limit>
</vrf>
</vrfs>
</ipv6>
</mrib>

```

### Command Syntax

```
ipv6 multicast (vrf NAME|) route-limit <1-2147483647> <1-2147483647>
```

---

## debug ipv6 mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

### Netconf RPC payload

```

<ipi-mrib-ipv6_mrib-ipv6-terminal-debug-on xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mrib">
  <vrf-name>WORD</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-mrib-ipv6_mrib-ipv6-terminal-debug-on>

```

### Command Syntax

```
debug ipv6 mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-
msg|mrib-msg|mtrace|mtrace-detail)
```

---

## no debug ipv6 mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: terminal-debug-options

Attribute Type: bits (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-msg|mrib-msg|mtrace|mtrace-detail)

**Netconf RPC payload**

```
<ipi-mrib-ipv6_mrib-ipv6-terminal-debug-off xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mrib">
  <vrf-name>WORD</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</ipi-mrib-ipv6_mrib-ipv6-terminal-debug-off>
```

**Command Syntax**

```
no debug ipv6 mrib (vrf WORD|) (all|event|vif|mrt|stats|fib-msg|register-msg|nsm-
msg|mrib-msg|mtrace|mtrace-detail)
```

---

**clear ipv6 mroute (vrf NAME|) \***

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: all-routes

Attribute Type: empty

**Netconf RPC payload**

```
<ipi-mrib-ipv6_mrib-ipv6-clear-mroute-all xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <all-routes>CML_EMPTY_T</all-routes>
</ipi-mrib-ipv6_mrib-ipv6-clear-mroute-all>
```

**Command Syntax**

```
clear ipv6 mroute (vrf NAME|) *
```

---

**clear ipv6 mroute (vrf NAME|) X:X::X:X**

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv6-address

**Netconf RPC payload**

```
<ipi-mrib-ipv6_mrib-ipv6-clear-mroute-group xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
</ipi-mrib-ipv6_mrib-ipv6-clear-mroute-group>
```

**Command Syntax**

```
clear ipv6 mroute (vrf NAME|) X:X::X:X
```

---

## clear ipv6 mroute (vrf NAME|) X:X::X:X X:X::X:X

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv6-address

Attribute Name: source-address

Attribute Type: inet:ipv6-address

### Netconf RPC payload

```
<ipi-mrib-ipv6_mrib-ipv6-clear-mroute-source-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
  <source-address>X:X::X:X</source-address>
</ipi-mrib-ipv6_mrib-ipv6-clear-mroute-source-group>
```

### Command Syntax

```
clear ipv6 mroute (vrf NAME|) X:X::X:X X:X::X:X
```

---

## clear ipv6 mroute (vrf NAME|) statistics \*

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: all-routes

Attribute Type: empty

### Netconf RPC payload

```
<ipi-mrib-ipv6_mrib-ipv6-clear-mroute-statistics-all xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <all-routes>CML_EMPTY_T</all-routes>
</ipi-mrib-ipv6_mrib-ipv6-clear-mroute-statistics-all>
```

### Command Syntax

```
clear ipv6 mroute (vrf NAME|) statistics *
```

---

## clear ipv6 mroute (vrf NAME|) statistics X:X::X:X

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv6-address

**Netconf RPC payload**

```
<ipi-mrib-ipv6_mrib-ipv6-clear-mroute-statistics-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
</ipi-mrib-ipv6_mrib-ipv6-clear-mroute-statistics-group>
```

**Command Syntax**

```
clear ipv6 mroute (vrf NAME|) statistics X:X::X:X
```

**clear ipv6 mroute (vrf NAME|) statistics X:X::X:X X:X::X:X**

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: group-address

Attribute Type: inet:ipv6-address

Attribute Name: source-address

Attribute Type: inet:ipv6-address

**Netconf RPC payload**

```
<ipi-mrib-ipv6_mrib-ipv6-clear-mroute-statistics-source-group xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-mrib">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
  <source-address>X:X::X:X</source-address>
</ipi-mrib-ipv6_mrib-ipv6-clear-mroute-statistics-source-group>
```

**Command Syntax**

```
clear ipv6 mroute (vrf NAME|) statistics X:X::X:X X:X::X:X
```

**IPI-IGMP****Configure disable ssm map**

Use this attribute to enable the IGMP operation on an interface. This command enables IGMP operation in standalone mode, and can be used to learn local-membership information prior to enabling a multicast routing protocol on the interface. This command will have no effect on interfaces configured for IGMP proxy.

Attribute Name: disable-ssm-map

Attribute Type: empty

**Netconf edit-config payload**

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
```



```

    <config>
      <vrf-name>NAME</vrf-name>
    </config>
  </disable-ssm-map><!-- operation="delete"-->
</vrf>
</vrfs>
</igmp>

```

### Command Syntax

```
no ip igmp (vrf NAME|) ssm-map enable
```

---

## Configure disable tos check

Use this attribute to disable TOS check for Internetwork Control

Attribute Name: disable-tos-check

Attribute Type: empty

### Netconf edit-config payload

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      </disable-tos-check><!-- operation="delete"-->
    </vrf>
  </vrfs>
</igmp>

```

### Command Syntax

```
no ip igmp (vrf NAME|) tos-check
```

---

## Configure limit exception acl

Use this attribute to set the maximum number of group membership states, at either the router level or at the interface level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address(es) to be excluded from being subject to the limit. This command applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy. The limit applies, individually, to each of its constituent interfaces.

Attribute Name: limit-exception-acl

Attribute Type: string

Attribute Name: member-limit

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-2097152

**Netconf edit-config payload**

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <group-membership-control>
    <config>
      <member-limit>1</member-limit> <!-- operation="delete"-->
      <limit-exception-acl>WORD</limit-exception-acl> <!-- operation="delete"-->
    </config>
  </group-membership-control>
</igmp>

```

**Command Syntax**

```
ip igmp (vrf NAME|) limit <1-2097152> (except WORD|)
```

**Configure member limit**

Use this attribute to set the maximum number of group membership states, at either the router level or at the interface level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address(es) to be excluded from being subject to the limit. This command applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy. The limit applies, individually, to each of its constituent interfaces.

Attribute Name: member-limit

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-2097152

**Netconf edit-config payload**

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <group-membership-control>
    <config>
      <member-limit>1</member-limit> <!-- operation="delete"-->
    </config>
  </group-membership-control>
</igmp>

```

```
</igmp>
```

## Command Syntax

```
ip igmp (vrf NAME|) limit <1-2097152>
```

---

## Configure source

Use this attribute to specify the static mode of defining SSM mapping. SSM mapping statically assigns sources to IGMPv1 and IGMPv2 groups to translate such (star G) groups memberships to (S,G) memberships for use with PIMSSM. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: source

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <ssm>
    <static-mappings>
      <static-mapping> <!-- operation="delete"-->
        <source>A.B.C.D</source>
        <config>
          <source>A.B.C.D</source>
          <group-ranges-acl>WORD</group-ranges-acl>
        </config>
      </static-mapping>
    </static-mappings>
  </ssm>
</igmp>
```

## Command Syntax

```
ip igmp (vrf NAME|) ssm-map static WORD A.B.C.D
```

---

## Configure options

Use this attribute to enable igmp debugging configurations

Attribute Name: options

Attribute Type: bits (all|decode|encode|events|fsm|tib)

## Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
```

```

<vrfs>
<vrf>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
<debug>
<config>
  <options>all</options> <!-- operation="delete"-->
</config>
</debug>
</vrf>
</vrfs>
</igmp>

```

### Command Syntax

```
debug ip igmp (vrf NAME|) (all|decode|encode|events|fsm|tib)
```

---

### debug ip igmp (vrf NAME|) (all|decode|encode|events|fsm|tib)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: terminal-debug-options

Attribute Type: bits (all|decode|encode|events|fsm|tib)

### Netconf RPC payload

```

<igmp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>
  <terminal-debug-options>all</terminal-debug-options>
</igmp-terminal-debug-on>

```

### Command Syntax

```
debug ip igmp (vrf NAME|) (all|decode|encode|events|fsm|tib)
```

---

### no debug ip igmp (vrf NAME|) (all|decode|encode|events|fsm|tib)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: terminal-debug-options

Attribute Type: bits (all|decode|encode|events|fsm|tib)

### Netconf RPC payload

```

<igmp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>

```

```
<terminal-debug-options>all</terminal-debug-options>
</igmp-terminal-debug-off>
```

## Command Syntax

```
no debug ip igmp (vrf NAME|) (all|decode|encode|events|fsm|tib)
```

---

## clear ip igmp (vrf NAME|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

## Netconf RPC payload

```
<igmp-clear-all-groups-for-vrf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>
</igmp-clear-all-groups-for-vrf>
```

## Command Syntax

```
clear ip igmp (vrf NAME|)
```

---

## clear ip igmp (vrf NAME|) group \*

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: clear-all

Attribute Type: empty

## Netconf RPC payload

```
<igmp-clear-all-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>
  <clear-all>CML_EMPTY_T</clear-all>
</igmp-clear-all-groups>
```

## Command Syntax

```
clear ip igmp (vrf NAME|) group *
```

---

## clear ip igmp (vrf NAME|) group A.B.C.D IFNAME

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: group-address

Attribute Type: inet:ipv4-address

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<igmp-clear-group-on-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
  <if-name>IFNAME</if-name>
</igmp-clear-group-on-interface>
```

### Command Syntax

```
clear ip igmp (vrf NAME|) group A.B.C.D IFNAME
```

---

## clear ip igmp (vrf NAME|) interface IFNAME

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<igmp-clear-all-groups-on-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>
  <if-name>IFNAME</if-name>
</igmp-clear-all-groups-on-interface>
```

### Command Syntax

```
clear ip igmp (vrf NAME|) interface IFNAME
```

---

## clear ip igmp (vrf NAME|) group A.B.C.D

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: group-address

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<igmp-clear-group xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <vrf-name>NAME</vrf-name>
  <group-address>A.B.C.D</group-address>
</igmp-clear-group>
```

---

## Command Syntax

```
clear ip igmp (vrf NAME|) group A.B.C.D
```

---

## IPI-IGMP-INTERFACE

---

### Configure enabled

Use this attribute to enable the IGMP operation on an interface. This attribute enables IGMP operation in standalone mode, and can be used to learn local-membership information prior to enabling a multicast routing protocol on the interface. This attribute will have no effect on interfaces configured for IGMP proxy

Attribute Name: enabled

Attribute Type: empty

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enabled><!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

## Command Syntax

```
ip igmp
```

---

### Configure last member query count

Use this attribute to set the last-member query-count value. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: last-member-query-count

Attribute Type: uint8

Default Value: 2

Attribute Range: 2-7

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
</igmp>
```

```

        </config>
        <last-member-query-count>2</last-member-query-count> <!-- operation="delete"-->
->
    </interface>
</interfaces>
</igmp>

```

## Command Syntax

```
ip igmp last-member-query-count <2-7>
```

---

## Configure last member query interval

Use this attribute to configure the frequency at which the router sends IGMP group-specific host query messages. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: last-member-query-interval

Attribute Type: uint16

Default Value: 1000

Attribute Range: 1000-25500

## Netconf edit-config payload

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <last-member-query-interval>1000</last-member-query-interval> <!--
operation="delete"-->
    </interface>
  </interfaces>
</igmp>

```

## Command Syntax

```
ip igmp last-member-query-interval <1000-25500>
```

---

## Configure querier timeout

Use this attribute to set the timeout period before the router takes over as the querier for the interface after the previous querier has stopped querying. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: querier-timeout

Attribute Type: uint16

Default Value: 255

Attribute Range: 60-300



---

**Netconf edit-config payload**

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <querier-timeout>60</querier-timeout> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

**Command Syntax**

```
ip igmp querier-timeout <60-300>
```

---

**Configure query interval**

Use this attribute to set the frequency of sending IGMP host query messages. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: query-interval

Attribute Type: uint16

Default Value: 125

Attribute Range: 1-18000

**Netconf edit-config payload**

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <query-interval>1</query-interval> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

**Command Syntax**

```
ip igmp query-interval <1-18000>
```

---

**Configure query max response time**

Use this attribute to set the maximum response time advertised in IGMP queries. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: query-max-response-time

Attribute Type: uint8

Default Value: 10

Attribute Range: 1-240

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <query-max-response-time>1</query-max-response-time> <!-- operation="delete"-->
    ->
  </interface>
</interfaces>
</igmp>
```

### Command Syntax

```
ip igmp query-max-response-time <1-240>
```

---

## Configure startup query interval

Use this attribute to set a query interval value for IGMP

Attribute Name: startup-query-interval

Attribute Type: uint16

Default Value: 31

Attribute Range: 1-18000

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <startup-query-interval>1</startup-query-interval> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp startup-query-interval <1-18000>
```

---

## Configure startup query count

Use this attribute to set a startup query count for IGMP

Attribute Name: startup-query-count

Attribute Type: uint8

Default Value: 2

Attribute Range: 2-10

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <startup-query-count>2</startup-query-count> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp startup-query-count <2-10>
```

---

## Configure robustness variable

Use this attribute to set the robustness variable value on an interface. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: robustness-variable

Attribute Type: uint8

Default Value: 2

Attribute Range: 2-7

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <robustness-variable>2</robustness-variable> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp robustness-variable <2-7>
```

---

## Configure version

Use this attribute to set the current IGMP protocol version on an interface. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols and IGMP Proxy.

Attribute Name: version

Attribute Type: uint8

Default Value: 3

Attribute Range: 1-3

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <version>1</version> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp version <1-3>
```

---

## Configure require router alert option

Use this attribute to configure strict Router Advertisement validation for IGMP.

Attribute Name: require-router-alert-option

Attribute Type: empty

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </require-router-alert-option><!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp ra-option
```

---

## Configure allow offlink host

Use this attribute to configure off-link for IGMP.

Attribute Name: allow-offlink-host

Attribute Type: empty

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </allow-offlink-host><!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp offlink
```

---

## Configure enable proxy service

Use this attribute to designate an interface to be the IGMP proxy-service (upstream host-side) interface, thus enabling IGMP host-side protocol operation on this interface. All associated downstream router-side interfaces will have their memberships consolidated on this interface, according to IGMP host-side functionality

Attribute Name: enable-proxy-service

Attribute Type: empty

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <proxy>
        <config>
          </enable-proxy-service><!-- operation="delete"-->
        </config>
      </proxy>
    </interface>
  </interfaces>
</igmp>
```

## Command Syntax

```
ip igmp proxy-service
```

---

## Configure mroute proxy interface

Use this attribute to specify the IGMP Proxy service interface with which to be associated. IGMP router-side protocol operation is enabled only when the specified upstream proxy-service interface is functional.

Attribute Name: mroute-proxy-interface

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <proxy>
        <config>
          <mroute-proxy-interface>IFNAME</mroute-proxy-interface> <!--
operation="delete"-->
        </config>
      </proxy>
    </interface>
  </interfaces>
</igmp>
```

## Command Syntax

```
ip igmp mroute-proxy IFNAME
```

---

## Configure unsolicited report interval

Use this attribute to set an unsolicited report interval for an interface designated as an IGMP proxy

Attribute Name: unsolicited-report-interval

Attribute Type: uint16

Default Value: 1000

Attribute Range: 1000-25500

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
```

```

    </config>
    <proxy>
    <config>
        <unsolicited-report-interval>1000</unsolicited-report-interval> <!--
operation="delete"-->
    </config>
    </proxy>
</interface>
</interfaces>
</igmp>

```

## Command Syntax

```
ip igmp proxy unsolicited-report-interval <1000-25500>
```

## Configure limit exception acl

Use this attribute to set the maximum number of group membership states, at either the router level or at the interface level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address to be excluded from being subject to the limit.

Attribute Name: limit-exception-acl

Attribute Type: string

Attribute Name: member-limit

Attribute Type: uint32

Attribute Range: 1-2097152

## Netconf edit-config payload

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <group-membership-control>
        <config>
          <member-limit>1</member-limit> <!-- operation="delete"-->
          <limit-exception-acl>WORD</limit-exception-acl> <!-- operation="delete"--
>
        </config>
      </group-membership-control>
    </interface>
  </interfaces>
</igmp>

```

## Command Syntax

```
ip igmp limit <1-2097152> (except WORD|)
```

---

## Configure member limit

Use this attribute to set the maximum number of group membership states, at either the router level or at the interface level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address to be excluded from being subject to the limit.

Attribute Name: member-limit

Attribute Type: uint32

Attribute Range: 1-2097152

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <group-membership-control>
        <config>
          <member-limit>1</member-limit> <!-- operation="delete"-->
        </config>
      </group-membership-control>
    </interface>
  </interfaces>
</igmp>
```

### Command Syntax

```
ip igmp limit <1-2097152>
```

---

## Configure access group name

Use this attribute to control the multicast local-membership groups learned on an interface. This attribute applies to interfaces configured for IGMP Layer-3 multicast protocols, IGMP proxy.

Attribute Name: access-group-name

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <group-membership-control>
        <config>
```



```

        <access-group-name>WORD</access-group-name> <!-- operation="delete"-->
    </config>
</group-membership-control>
</interface>
</interfaces>
</igmp>

```

## Command Syntax

```
ip igmp access-group WORD
```

---

## Configure immediate leave groups list

In IGMP version 2, use this attribute to minimize the leave latency of IGMP memberships. This attribute is used when only one receiver host is connected to each interface. This command applies to interfaces configured for IGMP Layer-3 multicast protocols, IGMP Proxy.

Attribute Name: immediate-leave-groups-list

Attribute Type: string

Default Value: NULL

## Netconf edit-config payload

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <group-membership-control>
        <config>
          <immediate-leave-groups-list>WORD</immediate-leave-groups-list> <!--
operation="delete"-->
        </config>
      </group-membership-control>
    </interface>
  </interfaces>
</igmp>

```

## Command Syntax

```
ip igmp immediate-leave group-list WORD
```

---

## Configure group address

Use this attribute to statically configure group membership entries on an interface. To statically add only a group membership, do not specify any parameters. This attribute applies to IGMP operation on a specific interface to statically add group and/or source records on a VLAN interface to statically add group and/or source records.

Attribute Name: group-address

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <asm-static-groups>
        <asm-static-group> <!-- operation="delete"-->
          <group-address>A.B.C.D</group-address>
          <config>
            <group-address>A.B.C.D</group-address>
          </config>
        </asm-static-group>
      </asm-static-groups>
    </interface>
  </interfaces>
</igmp>

```

**Command Syntax**

```
ip igmp static-group A.B.C.D
```

---

**Configure source**

Use this attribute to statically configure the group to be joined.

Attribute Name: source

Attribute Type: union

**Netconf edit-config payload**

```

<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <ssm-static-groups>
        <ssm-static-group> <!-- operation="delete"-->
          <source>ssm-map</source>
          <config>
            <source>ssm-map</source>
            <group-address>A.B.C.D</group-address>
          </config>
          <group-address>A.B.C.D</group-address>
        </ssm-static-group>
      </ssm-static-groups>
    </interface>
  </interfaces>

```

```
</igmp>
```

## Command Syntax

```
ip igmp static-group A.B.C.D source (ssm-map|A.B.C.D)
```

---

## Configure name

Use this attribute to configure a join multicast group.

Attribute Name: group-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```
<igmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <asm-join-groups>
        <asm-join-group> <!-- operation="delete"-->
          <group-address>A.B.C.D</group-address>
          <config>
            <group-address>A.B.C.D</group-address>
          </config>
        </asm-join-group>
      </asm-join-groups>
    </interface>
  </interfaces>
</igmp>
```

## Command Syntax

```
ip igmp join-group A.B.C.D
```

---

# IPI-IGMP-SNOOPING

---

## Configure disable igmp snooping

Use this attribute to disable IGMP Snooping. When this attribute is given in the Configure mode, IGMP snooping is enabled at switch level on all the vlans in switch. When this attribute is given at the VLAN interface level, IGMP Snooping is enabled for that VLAN.

Attribute Name: disable-igmp-snooping

Attribute Type: uint8

## Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
```

```
<global>
<config>
  </disable-igmp-snooping><!-- operation="delete"-->
</config>
</global>
</igmp-snooping>
```

### Command Syntax

```
no igmp snooping
```

---

## Configure disable report suppression

Use this attribute to disable report suppression for IGMP version 1, 2 and 3 reports. By default report suppression is enabled.

Attribute Name: disable-report-suppression

Attribute Type: uint8

### Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<global>
<config>
  </disable-report-suppression><!-- operation="delete"-->
</config>
</global>
</igmp-snooping>
```

### Command Syntax

```
no igmp snooping report-suppression
```

---

## Configure unknown multicast action

Use this attribute to set the action to be taken on receiving I2 unknown multicast packets.

Attribute Name: unknown-multicast-action

Attribute Type: enum (flood|discard)

Default Value: flood

### Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<global>
<config>
  <unknown-multicast-action>flood</unknown-multicast-action> <!--
operation="delete"-->
</config>
</global>
</igmp-snooping>
```

### Command Syntax

```
l2 unknown mcast (flood|discard)
```

---

## Configure options

Enable IGMP snooping debug

Attribute Name: options

Attribute Type: bits (decode|encode|events|fsm|tib|all)

### Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <debug>
    <config>
      <options>decode</options> <!-- operation="delete"-->
    </config>
  </debug>
</igmp-snooping>
```

### Command Syntax

```
debug igmp snooping (decode|encode|events|fsm|tib|all)
```

---

## Configure igmp snooping

Use this attribute to enable or disable IGMP Snooping. When this command is given at the VLAN interface level, IGMP Snooping is enabled for that VLAN.

Attribute Name: igmp-snooping

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <igmp-snooping>disable</igmp-snooping> <!-- operation="delete"-->
    </interface>
  </interfaces>
</igmp-snooping>
```

### Command Syntax

```
no ip igmp snooping
```

---

## Configure report suppression

Use this attribute to enable or disable report suppression for IGMP version 1, 2 and 3 reports. By default report suppression is enabled.

Attribute Name: report-suppression

Attribute Type: enum (disable|enable)

**Netconf edit-config payload**

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <report-suppression>disable</report-suppression> <!-- operation="delete"-->
</interface>
</interfaces>
</igmp-snooping>
```

**Command Syntax**

```
no ip igmp snooping report-suppression
```

---

**Configure enable fast leave**

Use this attribute to enable IGMP Snooping fast-leave processing. Fast-leave processing is analogous to immediateleave processing the IGMP group-membership is removed, as soon as an IGMP leave group message is received without sending out a group-specific query

Attribute Name: enable-fast-leave

Attribute Type: uint8

**Netconf edit-config payload**

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </enable-fast-leave><!-- operation="delete"-->
</interface>
</interfaces>
</igmp-snooping>
```

**Command Syntax**

```
ip igmp snooping fast-leave
```

---

**Configure mrouter interface name**

Use this attribute to statically configure the specified VLAN constituent interface as a multicast router interface for IGMP Snooping in that VLAN.

Attribute Name: mrouter-interface-name

Attribute Type: string

**Netconf edit-config payload**

```

<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <mrouter-interface-name>IFNAME</mrouter-interface-name> <!-- operation="delete"-
->
</interface>
</interfaces>
</igmp-snooping>

```

**Command Syntax**

```
ip igmp snooping mrouter interface IFNAME
```

**Configure enable querier**

Use this attribute to enable IGMP snooping querier functionality on a VLAN when IGMP is not enabled on the particular VLAN. When enabled, the IGMP Snooping querier sends out periodic IGMP queries for all interfaces on that VLAN. The IGMP Snooping querier uses the 0.0.0.0 source IP address, because it only masquerades as a proxy IGMP querier for faster network convergence. It does not start, or automatically cease, the IGMP Querier operation if it detects query message(s) from a multicast router. It restarts as the IGMP Snooping querier if no queries are seen within the other querier interval.

Attribute Name: enable-querier

Attribute Type: uint8

**Netconf edit-config payload**

```

<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </enable-querier><!-- operation="delete"-->
</interface>
</interfaces>
</igmp-snooping>

```

**Command Syntax**

```
ip igmp snooping querier
```

**Configure name**

Use this attribute to enable or disable IGMP Snooping. When this command is given at the VLAN interface level, IGMP Snooping is enabled for that VLAN.

Attribute Name: igmp-snooping

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <igmp-snooping>disable</igmp-snooping> <!-- operation="delete"-->
</interface>
</interfaces>
</igmp-snooping>
```

### Command Syntax

```
igmp snooping (disable|enable)
```

---

## Configure source address

Use this attribute to set the Source Address to be joined

Attribute Name: source-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<static-groups>
<ssm-groups>
<ssm-group>
  <interface-name>IFNAME</interface-name>
  <config>
    <interface-name>IFNAME</interface-name>
    <source-address>A.B.C.D</source-address>
    <group-address>A.B.C.D</group-address>
  </config>
  <source-address>A.B.C.D</source-address>
  <group-address>A.B.C.D</group-address>
</ssm-group>
</ssm-groups>
</static-groups>
</interface>
</interfaces>
</igmp-snooping>
```



---

## Command Syntax

```
igmp snooping static-group A.B.C.D source A.B.C.D interface IFNAME
```

---

## Configure group address

Use this attribute to set the static group-address to be joined

Attribute Name: group-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```
<igmp-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <static-groups>
      <ssm-groups>
        <ssm-group>
          <interface-name>IFNAME</interface-name>
          <config>
            <interface-name>IFNAME</interface-name>
            <source-address>A.B.C.D</source-address>
            <group-address>A.B.C.D</group-address>
          </config>
          <source-address>A.B.C.D</source-address>
          <group-address>A.B.C.D</group-address>
        </ssm-group>
      </ssm-groups>
    </static-groups>
  </interface>
</interfaces>
</igmp-snooping>
```

## Command Syntax

```
igmp snooping static-group A.B.C.D interface IFNAME
```

---

## clear igmp snooping group A.B.C.D IFNAME

Attribute Name: group-address

Attribute Type: inet:ipv4-address

Attribute Name: interface-name

Attribute Type: string

---

**Netconf RPC payload**

```
<igmp-snooping-clear-group-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <group-address>A.B.C.D</group-address>
  <interface-name>IFNAME</interface-name>
</igmp-snooping-clear-group-interface>
```

**Command Syntax**

```
clear igmp snooping group A.B.C.D IFNAME
```

---

**clear igmp snooping interface IFNAME**

Attribute Name: interface-name

Attribute Type: string

**Netconf RPC payload**

```
<igmp-snooping-clear-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <interface-name>IFNAME</interface-name>
</igmp-snooping-clear-interface>
```

**Command Syntax**

```
clear igmp snooping interface IFNAME
```

---

**clear igmp snooping group \*****Netconf RPC payload**

```
<igmp-snooping-clear-group-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping"/>
```

**Command Syntax**

```
clear igmp snooping group *
```

---

**clear igmp snooping****Netconf RPC payload**

```
<igmp-snooping-clear-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping"/>
```

**Command Syntax**

```
clear igmp snooping
```

---

**clear igmp snooping group A.B.C.D**

Attribute Name: group-address

Attribute Type: inet:ipv4-address

---

### Netconf RPC payload

```
<igmp-snooping-clear-group xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <group-address>A.B.C.D</group-address>
</igmp-snooping-clear-group>
```

### Command Syntax

```
clear igmp snooping group A.B.C.D
```

---

## debug igmp snooping (decode|encode|events|fsm|tib|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (decode|encode|events|fsm|tib|all)

### Netconf RPC payload

```
<igmp-snooping-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <terminal-debug-options>decode</terminal-debug-options>
</igmp-snooping-terminal-debug-on>
```

### Command Syntax

```
debug igmp snooping (decode|encode|events|fsm|tib|all)
```

---

## no debug igmp snooping (decode|encode|events|fsm|tib|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (decode|encode|events|fsm|tib|all)

### Netconf RPC payload

```
<igmp-snooping-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-igmp-snooping">
  <terminal-debug-options>decode</terminal-debug-options>
</igmp-snooping-terminal-debug-off>
```

### Command Syntax

```
no debug igmp snooping (decode|encode|events|fsm|tib|all)
```

---

## IPI-MLD-SNOOPING

---

### Configure disable mld snooping

Use this attribute to enable MLD Snooping. When this command is given in the Configure mode, MLD Snooping is enabled at the switch level. When this attribute is given at the VLAN interface level, 5MLD Snooping is enabled for that VLAN.

Attribute Name: disable-mld-snooping

Attribute Type: uint8

---

**Netconf edit-config payload**

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <global>
    <config>
      </disable-mld-snooping><!-- operation="delete"-->
    </config>
  </global>
</mld-snooping>
```

**Command Syntax**

```
no mld snooping
```

---

**Configure disable report suppression**

Use this attribute to enable report suppression for MLD version 1.

Attribute Name: disable-report-suppression

Attribute Type: uint8

**Netconf edit-config payload**

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <global>
    <config>
      </disable-report-suppression><!-- operation="delete"-->
    </config>
  </global>
</mld-snooping>
```

**Command Syntax**

```
no mld snooping report-suppression
```

---

**Configure options**

Use this attribute to enable mld snooping debugging configurations

Attribute Name: options

Attribute Type: bits (decode|encode|events|fsm|tib|all)

**Netconf edit-config payload**

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <debug>
    <config>
      <options>decode</options> <!-- operation="delete"-->
    </config>
  </debug>
</mld-snooping>
```

**Command Syntax**

```
debug mld snooping (decode|encode|events|fsm|tib|all)
```

---

## Configure report suppression

Use this attribute to enable or disable report suppression for MLD version 1, and 2 reports. By default report suppression is enabled.

Attribute Name: report-suppression

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <report-suppression>disable</report-suppression> <!-- operation="delete"-->
</interface>
</interfaces>
</mld-snooping>
```

### Command Syntax

```
no mld snooping report-suppression
```

---

## Configure mld snooping

Use this attribute to enable MLD Snooping. When this attribute is given at the VLAN interface level, MLD Snooping is enabled for that VLAN.

Attribute Name: mld-snooping

Attribute Type: enum (disable|enable)

Default Value: enable

### Netconf edit-config payload

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <mld-snooping>enable</mld-snooping> <!-- operation="delete"-->
</interface>
</interfaces>
</mld-snooping>
```

### Command Syntax

```
mld snooping (disable|enable)
```

---

## Configure enable fast leave

Use this attribute to enable MLD Snooping fast-leave processing. Fast-leave processing is analogous to immediateleave processing the MLD group-membership is removed, as soon as an MLD leave group message is received without sending out a group-specific query.

Attribute Name: enable-fast-leave

Attribute Type: empty

### Netconf edit-config payload

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-fast-leave><!-- operation="delete"-->
    </interface>
  </interfaces>
</mld-snooping>
```

### Command Syntax

```
mld snooping fast-leave
```

---

## Configure name

Use this attribute to enable or disable report suppression for MLD version 1, and 2 reports. By default report suppression is enabled.

Attribute Name: report-suppression

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <report-suppression>disable</report-suppression> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld-snooping>
```

### Command Syntax

```
mld snooping report-suppression (disable|enable)
```

---

## Configure mrouter interface name

Use this attribute to statically configure the specified VLAN constituent interface as a multicast router interface for MLD Snooping in that VLAN

Attribute Name: mrouter-interface-name

Attribute Type: string

### Netconf edit-config payload

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <mrouter-interface-name>IFNAME</mrouter-interface-name> <!-- operation="delete"-
->
    </interface>
  </interfaces>
</mld-snooping>
```

### Command Syntax

```
mld snooping mrouter interface IFNAME
```

---

## Configure enable querier

Use this attribute to enable MLD querier operation on a subnet (VLAN) when no multicast routing protocol is configured in the subnet VLAN. When enabled, the MLD Snooping querier sends out periodic MLD queries for all interfaces on that VLAN. The MLD Snooping querier uses the 0.0.0.0 source IP address, because it masquerades as a proxy MLD querier for faster network convergence. It does not start or automatically cease the MLD querier operation if it detects a query message from a multicast router. It restarts as MLD snooping querier if no queries are seen within another querier interval

Attribute Name: enable-querier

Attribute Type: empty

### Netconf edit-config payload

```
<mld-snooping xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-snooping">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enable-querier><!-- operation="delete"-->
    </interface>
  </interfaces>
</mld-snooping>
```

---

## Command Syntax

```
mld snooping querier
```

---

## debug mld snooping (decode|encode|events|fsm|tib|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (decode|encode|events|fsm|tib|all)

### Netconf RPC payload

```
<mld-snooping-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
mld-snooping">
  <terminal-debug-options>decode</terminal-debug-options>
</mld-snooping-terminal-debug-on>
```

## Command Syntax

```
debug mld snooping (decode|encode|events|fsm|tib|all)
```

---

## no debug mld snooping (decode|encode|events|fsm|tib|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (decode|encode|events|fsm|tib|all)

### Netconf RPC payload

```
<mld-snooping-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-mld-snooping">
  <terminal-debug-options>decode</terminal-debug-options>
</mld-snooping-terminal-debug-off>
```

## Command Syntax

```
no debug mld snooping (decode|encode|events|fsm|tib|all)
```

---

## clear mld snooping group X:X::X:X IFNAME

Attribute Name: group-address

Attribute Type: string

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<mld-snooping-clear-group-on-interface xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-mld-snooping">
  <group-address>X:X::X:X</group-address>
  <interface-name>IFNAME</interface-name>
</mld-snooping-clear-group-on-interface>
```

## Command Syntax

```
clear mld snooping group X:X::X:X IFNAME
```



---

## clear mld snooping interface IFNAME

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<mld-snooping-clear-all-groups-on-interface xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-mld-snooping">
  <interface-name>IFNAME</interface-name>
</mld-snooping-clear-all-groups-on-interface>
```

### Command Syntax

```
clear mld snooping interface IFNAME
```

---

## clear mld snooping group X:X::X:X

Attribute Name: group-address

Attribute Type: string

### Netconf RPC payload

```
<mld-snooping-clear-group xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld-
snooping">
  <group-address>X:X::X:X</group-address>
</mld-snooping-clear-group>
```

### Command Syntax

```
clear mld snooping group X:X::X:X
```

---

## clear mld snooping group \*

### Netconf RPC payload

```
<mld-snooping-clear-all-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
mld-snooping"/>
```

### Command Syntax

```
clear mld snooping group *
```

---

## clear mld snooping

### Netconf RPC payload

```
<mld-snooping-clear-all-groups-alias xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-mld-snooping"/>
```

### Command Syntax

```
clear mld snooping
```

---

## IPI-MLD

---

### Configure disable ssm map

Use this attribute to enable/disable SSM mapping on the router

Attribute Name: disable-ssm-map

Attribute Type: empty

#### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      </disable-ssm-map><!-- operation="delete"-->
    </vrf>
  </vrfs>
</mld>
```

#### Command Syntax

```
no ipv6 mld (vrf NAME|) ssm-map enable
```

---

### Configure limit exception acl

Use this attribute to set the maximum number of group membership states at the router level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address(es) to be excluded from being subject to the limit. This command applies to interfaces configured for MLD Layer-3 multicast protocols and MLD Proxy. The limit applies, individually, to each of its constituent interfaces.

Attribute Name: limit-exception-acl

Attribute Type: string

Attribute Name: member-limit

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-2097152

#### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
</mld>
```

```

    </config>
  <group-membership-control>
    <config>
      <member-limit>1</member-limit> <!-- operation="delete"-->
      <limit-exception-acl>WORD</limit-exception-acl> <!-- operation="delete"-->
    </config>
  </group-membership-control>
</vrf>
</vrfs>
</mld>

```

## Command Syntax

```
ipv6 mld (vrf NAME|) limit <1-2097152> (except WORD|)
```

## Configure member limit

Use this attribute to set the maximum number of group membership states at the router level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address(es) to be excluded from being subject to the limit. This command applies to interfaces configured for MLD Layer-3 multicast protocols and MLD Proxy. The limit applies, individually, to each of its constituent interfaces.

Attribute Name: member-limit

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-2097152

## Netconf edit-config payload

```

<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    <group-membership-control>
      <config>
        <member-limit>1</member-limit> <!-- operation="delete"-->
      </config>
    </group-membership-control>
  </vrf>
</vrfs>
</mld>

```

## Command Syntax

```
ipv6 mld (vrf NAME|) limit <1-2097152>
```

---

## Configure source

Use this attribute to specify the static mcast source for SSM mapping. SSM mapping statically assigns sources to MLDv1 groups to translate such (star G) groups memberships to (S,G) memberships for use with PIM-SSM. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols and MLD Proxy.

Attribute Name: source

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <ssm>
    <static-mappings>
      <static-mapping> <!-- operation="delete"-->
        <source>X:X::X:X</source>
        <config>
          <source>X:X::X:X</source>
          <group-ranges-acl>WORD</group-ranges-acl>
        </config>
        <group-ranges-acl>WORD</group-ranges-acl>
      </static-mapping>
    </static-mappings>
  </ssm>
</mld>
```

### Command Syntax

```
ipv6 mld (vrf NAME|) ssm-map static WORD X:X::X:X
```

---

## Configure debug options

Use this attribute to enable mld debugging configurations

Attribute Name: debug-options

Attribute Type: bits (all|decode|encode|events|fsm|tib)

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
    </vrf>
  </vrfs>
</mld>
```

```

    </config>
  <debug>
    <config>
      <debug-options>all</debug-options> <!-- operation="delete"-->
    </config>
  </debug>
</vrf>
</vrfs>
</mld>

```

## Command Syntax

```
debug ipv6 mld (vrf NAME|) (all|decode|encode|events|fsm|tib)
```

---

### debug ipv6 mld (vrf NAME|) (all|decode|encode|events|fsm|tib)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: term-debug-options

Attribute Type: bits (all|decode|encode|events|fsm|tib)

## Netconf RPC payload

```

<mld-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrf-name>NAME</vrf-name>
  <term-debug-options>all</term-debug-options>
</mld-terminal-debug-on>

```

## Command Syntax

```
debug ipv6 mld (vrf NAME|) (all|decode|encode|events|fsm|tib)
```

---

### no debug ipv6 mld (vrf NAME|) (all|decode|encode|events|fsm|tib)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: term-debug-options

Attribute Type: bits (all|decode|encode|events|fsm|tib)

## Netconf RPC payload

```

<mld-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrf-name>NAME</vrf-name>
  <term-debug-options>all</term-debug-options>
</mld-terminal-debug-off>

```

## Command Syntax

```
no debug ipv6 mld (vrf NAME|) (all|decode|encode|events|fsm|tib)
```

---

## clear ipv6 mld (vrf NAME|)

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

### Netconf RPC payload

```
<mld-clear-all-groups-alias xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
mld">
  <vrf-name>NAME</vrf-name>
</mld-clear-all-groups-alias>
```

### Command Syntax

```
clear ipv6 mld (vrf NAME|)
```

---

## clear ipv6 mld (vrf NAME|) group \*

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: clear-all

Attribute Type: empty

### Netconf RPC payload

```
<mld-clear-all-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrf-name>NAME</vrf-name>
  <clear-all>CML_EMPTY_T</clear-all>
</mld-clear-all-groups>
```

### Command Syntax

```
clear ipv6 mld (vrf NAME|) group *
```

---

## clear ipv6 mld (vrf NAME|) group X:X::X:X IFNAME

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: group-address

Attribute Type: inet:ipv6-address

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<mld-clear-group-on-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
mld">
```

```

<vrf-name>NAME</vrf-name>
<group-address>X:X::X:X</group-address>
<if-name>IFNAME</if-name>
</mld-clear-group-on-interface>

```

## Command Syntax

```
clear ipv6 mld (vrf NAME|) group X:X::X:X IFNAME
```

---

## clear ipv6 mld (vrf NAME|) interface IFNAME

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: if-name

Attribute Type: string

## Netconf RPC payload

```

<mld-clear-all-groups-on-interface xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-mld">
  <vrf-name>NAME</vrf-name>
  <if-name>IFNAME</if-name>
</mld-clear-all-groups-on-interface>

```

## Command Syntax

```
clear ipv6 mld (vrf NAME|) interface IFNAME
```

---

## clear ipv6 mld (vrf NAME|) group X:X::X:X

Attribute Name: vrf-name

Attribute Type: string

Default Value: default

Attribute Name: group-address

Attribute Type: inet:ipv6-address

## Netconf RPC payload

```

<mld-clear-group xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <vrf-name>NAME</vrf-name>
  <group-address>X:X::X:X</group-address>
</mld-clear-group>

```

## Command Syntax

```
clear ipv6 mld (vrf NAME|) group X:X::X:X
```

---

## IPI-MLD-INTERFACE

---

### Configure enabled

Use this attribute to enable the MLD protocol operation on an interface. This attribute enables MLD protocol operation in stand-alone mode, and can be used to learn local-membership information prior to enabling a multicast routing protocol on the interface. This attribute will have no effect on interfaces configured for MLD Proxy.

Attribute Name: enabled

Attribute Type: empty

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enabled><!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld
```

---

### Configure last member query count

Use this attribute to set the last-member query-count value. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy.

Attribute Name: last-member-query-count

Attribute Type: uint8

Default Value: 2

Attribute Range: 2-7

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <last-member-query-count>2</last-member-query-count> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>
```



```
</interfaces>
</mld>
```

## Command Syntax

```
ipv6 mld last-member-query-count <2-7>
```

---

## Configure last member query interval

Use this attribute to set the frequency at which the router sends MLD group-specific host query messages. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy

Attribute Name: last-member-query-interval

Attribute Type: uint16

Default Value: 1000

Attribute Range: 1000-25500

## Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <last-member-query-interval>1000</last-member-query-interval> <!--
operation="delete"-->
</interface>
</interfaces>
</mld>
```

## Command Syntax

```
ipv6 mld last-member-query-interval <1000-25500>
```

---

## Configure querier timeout

Use this attribute to configure the timeout period before the router takes over as the querier for the interface after the previous querier has stopped querying. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy.

Attribute Name: querier-timeout

Attribute Type: uint16

Default Value: 250

Attribute Range: 60-300

## Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
<interfaces>
<interface>
  <name>WORD</name>
```

```
<config>
  <name>WORD</name>
</config>
  <querier-timeout>60</querier-timeout> <!-- operation="delete"-->
</interface>
</interfaces>
</mld>
```

## Command Syntax

```
ipv6 mld querier-timeout <60-300>
```

---

## Configure query interval

Use this attribute to set the frequency of sending MLD host query messages. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy.

Attribute Name: query-interval

Attribute Type: uint16

Default Value: 125

Attribute Range: 1-18000

## Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <query-interval>1</query-interval> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>
```

## Command Syntax

```
ipv6 mld query-interval <1-18000>
```

---

## Configure query max response time

Use this attribute to set the maximum response time advertised in MLD queries. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy.

Attribute Name: query-max-response-time

Attribute Type: uint8

Default Value: 10

Attribute Range: 1-240

**Netconf edit-config payload**

```

<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <query-max-response-time>1</query-max-response-time> <!-- operation="delete"-
->
    </interface>
  </interfaces>
</mld>

```

**Command Syntax**

```
ipv6 mld query-max-response-time <1-240>
```

---

**Configure startup query interval**

Use this attribute to set a startup query interval value for MLD

Attribute Name: startup-query-interval

Attribute Type: uint16

Default Value: 31

Attribute Range: 1-18000

**Netconf edit-config payload**

```

<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <startup-query-interval>1</startup-query-interval> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>

```

**Command Syntax**

```
ipv6 mld startup-query-interval <1-18000>
```

---

**Configure startup query count**

Use this attribute to set a startup query count for MLD

Attribute Name: startup-query-count

Attribute Type: uint8

Default Value: 2

Attribute Range: 2-10

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <startup-query-count>2</startup-query-count> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld startup-query-count <2-10>
```

---

## Configure robustness variable

Use this attribute to set the robustness variable value on an interface. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy.

Attribute Name: robustness-variable

Attribute Type: uint8

Default Value: 2

Attribute Range: 2-7

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <robustness-variable>2</robustness-variable> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld robustness-variable <2-7>
```

---

## Configure version

Use this attribute to set the current MLD protocol version on an interface. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Snooping, or MLD Proxy.

Attribute Name: version

Attribute Type: uint8

Attribute Range: 1-2

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <version>1</version> <!-- operation="delete"-->
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld version <1-2>
```

---

## Configure enable proxy service

Use this attribute to designate an interface to be the MLD proxy-service upstream host-side interface, thus enabling MLD host-side protocol operation on this interface. All associated downstream router-side interfaces will have their memberships consolidated on this interface, according to MLD host-side functionality. This attribute should not be used when configuring interfaces enabled for MLD in association with a multicast-routing protocol, otherwise the behavior will be undefined.

Attribute Name: enable-proxy-service

Attribute Type: empty

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <proxy>
        <config>
          </enable-proxy-service><!-- operation="delete"-->
        </config>
      </proxy>
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld proxy-service
```

---

## Configure mroute proxy interface

Use this attribute to specify the MLD Proxy service (upstream host-side) interface with which to be associated. MLD router-side protocol operation is enabled only when the specified upstream proxy-service interface is functional. This attribute should not be configured on interfaces enabled for MLD in association with a multicast routing protocol otherwise, the behavior will be undefined.

Attribute Name: mroute-proxy-interface

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <proxy>
        <config>
          <mroute-proxy-interface>IFNAME</mroute-proxy-interface> <!--
operation="delete"-->
        </config>
      </proxy>
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld mroute-proxy IFNAME
```

---

## Configure unsolicited report interval

Use this attribute to set an unsolicited report interval for an interface designated as an MLD proxy

Attribute Name: unsolicited-report-interval

Attribute Type: uint16

Default Value: 1000

Attribute Range: 1000-25500

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
</mld>
```

```

    <proxy>
    <config>
        <unsolicited-report-interval>1000</unsolicited-report-interval> <!--
operation="delete"-->
    </config>
</proxy>
</interface>
</interfaces>
</mld>

```

## Command Syntax

```
ipv6 mld proxy unsolicited-report-interval <1000-25500>
```

## Configure limit exception acl

Use this attribute to set the maximum number of group membership states, at either the router level or at the interface level. Once the specified number of group memberships is reached, all further local-memberships are ignored. Optionally, an exception access-list can be configured to specify the group-address to be excluded from being subject to the limit.

Attribute Name: limit-exception-acl

Attribute Type: string

Default Value: NULL

Attribute Name: member-limit

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-2097152

## Netconf edit-config payload

```

<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <group-membership-control>
        <config>
          <member-limit>1</member-limit> <!-- operation="delete"-->
          <limit-exception-acl>WORD</limit-exception-acl> <!-- operation="delete"--
>
        </config>
      </group-membership-control>
    </interface>
  </interfaces>
</mld>

```

## Command Syntax

```
ipv6 mld limit <1-2097152> (except WORD|)
```

---

## Configure member limit

Use this attribute to set the limit on the maximum number of group membership states at either the router level, or for the specified interface. Once the specified number of group memberships is reached, all further local-memberships will be ignored. Optionally, an exception access-list can be configured to specify the group-address(es) to be excluded from being subject to the limit.

Attribute Name: member-limit

Attribute Type: uint32

Default Value: 1

Attribute Range: 1-2097152

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <group-membership-control>
        <config>
          <member-limit>1</member-limit> <!-- operation="delete"-->
        </config>
      </group-membership-control>
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld limit <1-2097152>
```

---

## Configure access group name

Use this attribute to control the multicast local-membership groups learned on an interface. This attribute applies to interfaces configured for MLD Layer-3 multicast protocols, MLD proxy.

Attribute Name: access-group-name

Attribute Type: string

Default Value: NULL

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
</mld>
```



```

    <group-membership-control>
    <config>
        <access-group-name>WORD</access-group-name> <!-- operation="delete"-->
    </config>
</group-membership-control>
</interface>
</interfaces>
</mld>

```

## Command Syntax

```
ipv6 mld access-group WORD
```

---

## Configure immediate leave groups list

In MLD version 2, use this attribute to minimize the leave latency of MLD memberships. This attribute is used when only one receiver host is connected to each interface. This command applies to interfaces configured for MLD Layer-3 multicast protocols, MLD Proxy.

Attribute Name: immediate-leave-groups-list

Attribute Type: string

Default Value: NULL

## Netconf edit-config payload

```

<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <group-membership-control>
    <config>
        <immediate-leave-groups-list>WORD</immediate-leave-groups-list> <!--
operation="delete"-->
    </config>
    </group-membership-control>
</interface>
</interfaces>
</mld>

```

## Command Syntax

```
ipv6 mld immediate-leave group-list WORD
```

---

## Configure group address

Use this attribute to statically configure IPv6 group membership entries on an interface. To statically add only a group membership, do not specify any parameters. This attribute applies to MLD operation on a specific interface to statically add group and/or source records or to MLD Snooping on a VLAN interface to statically add group and/or source records.

Attribute Name: group-address

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <asm-static-groups>
        <asm-static-group> <!-- operation="delete"-->
          <group-address>X:X::X:X</group-address>
          <config>
            <group-address>X:X::X:X</group-address>
          </config>
        </asm-static-group>
      </asm-static-groups>
    </interface>
  </interfaces>
</mld>
```

### Command Syntax

```
ipv6 mld static-group X:X::X:X
```

---

## Configure source

Use this attribute to statically configure the multicast source for group to be joined.

Attribute Name: source

Attribute Type: union

### Netconf edit-config payload

```
<mld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mld">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <ssm-static-groups>
        <ssm-static-group> <!-- operation="delete"-->
          <source>ssm-map</source>
          <config>
            <source>ssm-map</source>
            <group-address>X:X::X:X</group-address>
          </config>
          <group-address>X:X::X:X</group-address>
        </ssm-static-group>
      </ssm-static-groups>
    </interface>
  </interfaces>
</mld>
```

```

</interface>
</interfaces>
</mld>

```

## Command Syntax

```
ipv6 mld static-group X:X::X:X source (ssm-map|X:X::X:X)
```

---

# IPI-ROUTEMAP

---

## Configure action

Use this attribute to enter the route-map mode and to permit or deny match/set operations. If deny is specified, and the match criteria are met, the route is not redistributed, and any other route maps with the same map tag are not examined. If permit is specified, and the match criteria are met, the route is redistributed as specified by the set actions. If the match criteria are not met, the next route map with the same tag is tested.

Attribute Name: action

Attribute Type: enum (permit|deny)

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
    <action>permit</action>
  </routemap>
</routemaps>

```

## Command Syntax

```
route-map WORD ((permit|deny) |) (<1-65535> |)
```

---

## Configure continue to next sequence

The continue clause provides the capability to execute additional entries in a route map after an entry is executed with a successful match and set clauses. Example the continue command allows multiple entries to be evaluated within a single route-map.

Attribute Name: continue-to-next-sequence

Attribute Type: empty

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>

```

```

    <config>
      <sequence-id>1</sequence-id>
      <routermap-name>WORD</routermap-name>
    </config>
    <routermap-name>WORD</routermap-name>
  <continue-on-match>
<config>
  </continue-to-next-sequence><!-- operation="delete"-->
</config>
</continue-on-match>
</routermap>
</routermaps>

```

## Command Syntax

continue

---

## Configure next sequence number

Continue commands can be assigned optional sequence numbers that indicate the order in which clauses are to be evaluated.

Attribute Name: next-sequence-number

Attribute Type: uint32

Attribute Range: 2-65535

## Netconf edit-config payload

```

<routermaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routermap">
  <routermap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routermap-name>WORD</routermap-name>
    </config>
    <routermap-name>WORD</routermap-name>
  <continue-on-match>
<config>
  <next-sequence-number>2</next-sequence-number> <!-- operation="delete"-->
</config>
</continue-on-match>
</routermap>
</routermaps>

```

## Command Syntax

continue <2-65535>

---

## Configure interface name

Use this attribute to define the interface match criterion. This command specifies the next-hop interface name of a route to be matched

Attribute Name: interface-name

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<match-condition>
<config>
  <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
</config>
</match-condition>
</routemap>
</routemaps>
```

### Command Syntax

```
match interface IFNAME
```

---

## Configure metric

Use this attribute to match a metric of a route. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

Attribute Name: metric

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<match-condition>
<config>
  <metric>1</metric> <!-- operation="delete"-->
</config>
</match-condition>
</routemap>
</routemaps>
```

## Command Syntax

```
match metric <1-4294967295>
```

---

## Configure tag

Use this command to set a tag value. The parameter is the route tag that is labeled by another routing protocol (BGP or other IGP when redistributing), because AS-external-LSA has a route-tag field in its LSAs. In addition, when using route-map, OcNOS can tag the LSAs with the appropriate tag value. Sometimes the tag matches with using route-map and sometimes, the value may be used by another application.

Attribute Name: tag

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <config>
      <tag>1</tag> <!-- operation="delete"-->
    </config>
  </match-condition>
</routemap>
</routemaps>
```

## Command Syntax

```
match tag <1-4294967295>
```

---

## Configure route type

Use this attribute to match an external route type. AS-external LSA is either Type-1 or Type-2. External type-1 matches only Type 1 external routes and external type-2 matches only Type 2 external routes.

Attribute Name: route-type

Attribute Type: enum (type-1|type-2)

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
  </routemap>
</routemaps>
```

```

    </config>
    <route-map-name>WORD</route-map-name>
  <match-condition>
    <config>
      <route-type>type-1</route-type> <!-- operation="delete"-->
    </config>
  </match-condition>
</route-map>
</route-maps>

```

## Command Syntax

```
match route-type external (type-1|type-2)
```

---

## Configure as path name

Use this command to match an autonomous system path access list. This command specifies the autonomous system path to be matched. If there is a match for the specified AS path, and permit is specified, the route is redistributed or controlled, as specified by the set action. If the match criteria are met, and deny is specified, the route is not redistributed or controlled. If the match criteria are not met then the route is neither accepted nor forwarded, irrespective of permit or deny specifications. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes, depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

Attribute Name: as-path-name

Attribute Type: string

## Netconf edit-config payload

```

<route-maps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-route-map">
  <route-map>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <route-map-name>WORD</route-map-name>
    </config>
    <route-map-name>WORD</route-map-name>
  <match-condition>
    <config>
      <as-path-name>WORD</as-path-name> <!-- operation="delete"-->
    </config>
  </match-condition>
</route-map>
</route-maps>

```

## Command Syntax

```
match as-path WORD
```

---

## Configure route origin

Use this attribute to match origin code. The origin attribute defines the origin of the path information. The egp parameter is indicated as an e in the routing table, and it indicates that the origin of the information is learned via EGP (Exterior

Gateway Protocol). The igp parameter is indicated as an i in the routing table, and it indicates the origin of the path information is interior to the originating AS. The incomplete parameter is indicated as a ? in the routing table, and indicates that the origin of the path information is unknown or learned through other means. If a static route is redistributed into BGP, the origin of the route is incomplete. This command specifies the origin to be matched. If there is a match for the specified origin, and permit is specified when you created the route-map, the route is redistributed or controlled as specified by the set action. If the match criteria are met, and deny is specified, the route is not redistributed or controlled. If the match criteria are not met, the route is neither accepted nor forwarded, irrespective of permit or deny specifications. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables

Attribute Name: route-origin

Attribute Type: enum (egp|igp|incomplete)

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <config>
      <route-origin>egp</route-origin> <!-- operation="delete"-->
    </config>
  </match-condition>
</routemap>
</routemaps>
```

### Command Syntax

```
match origin (egp|igp|incomplete)
```

---

## Configure community identifier

Use this attribute to specify the community to be matched. Communities are used to group and filter routes. They are designed to provide the ability to apply policies to large numbers of routes by using match and set commands. Community lists are used to identify and filter routes by their common attributes. This command allows the matching based on community lists. The values set by the match community command overrides the global values. The route that does not match at least one match clause is ignored.

Attribute Name: community-identifier

Attribute Type: union

Attribute Name: match-type

Attribute Type: enum (no-exact-match|exact-match)

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
```



```

    <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routermap-name>WORD</routermap-name>
  </config>
  <routermap-name>WORD</routermap-name>
</match-condition>
</communities>
<community> <!-- operation="delete"-->
  <community-identifier>RMAP_COMMUNITY_STRING_T</community-identifier>
  <config>
    <community-identifier>RMAP_COMMUNITY_STRING_T</community-identifier>
    <match-type>no-exact-match</match-type>
  </config>
</community>
</communities>
</match-condition>
</routermap>
</routermaps>

```

## Command Syntax

```
match community (WORD|<1-99>|<100-500>) ((exact-match)|)
```

## Configure extended community identifier

Use this attribute to match BGP external community list. Communities are used to group and filter routes. They are designed to provide the ability to apply policies to large numbers of routes by using match and set commands. Community lists are used to identify and filter routes by their common attributes. This command allows the matching based on community lists. The values set by this command overrides the global values. The route that does not match at least one match clause is ignored

Attribute Name: extended-community-identifier

Attribute Type: union

Attribute Name: match-type

Attribute Type: enum (no-exact-match|exact-match)

## Netconf edit-config payload

```

<routermaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routermap">
  <routermap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routermap-name>WORD</routermap-name>
    </config>
    <routermap-name>WORD</routermap-name>
  </match-condition>
  <extended-communities>
    <extended-community> <!-- operation="delete"-->
      <extended-community-identifier>RMAP_EXTCOMMUNITY_STRING_T</extended-community-identifier>
    </extended-community>
  </extended-communities>
</routermaps>

```

```

    <config>
      <extended-community-identifier>RMAP_EXTCOMMUNITY_STRING_T</extended-
community-identifier>
      <match-type>no-exact-match</match-type>
    </config>
  </extended-community>
</extended-communities>
</match-condition>
</routemap>
</routemaps>

```

## Command Syntax

```
match extcommunity (WORD|<1-99>|<100-500>) ((exact-match)|)
```

## Configure match type

Do exact matching of communities

Attribute Name: match-type

Attribute Type: enum (no-exact-match|exact-match)

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <extended-communities>
      <extended-community>
        <extended-community-identifier>RMAP_EXTCOMMUNITY_STRING_T</extended-community-
identifier>
        <config>
          <extended-community-identifier>RMAP_EXTCOMMUNITY_STRING_T</extended-
community-identifier>
          </config>
          <match-type>0</match-type> <!-- operation="delete"-->
        </extended-community>
      </extended-communities>
    </match-condition>
  </routemap>
</routemaps>

```

## Command Syntax

```
no match extcommunity exact-match
```

---

## Configure ip access list name

Use this attribute to specify the match address of route. If there is a match for the specified IP address, and permit is specified, the route is redistributed or controlled, as specified by the set action. If the match criteria are met, and deny is specified then the route is not redistributed or controlled. If the match criteria are not met, the route is neither accepted nor forwarded, irrespective of permit or deny specifications. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes, depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

Attribute Name: ip-access-list-name

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  </match-condition>
  <ipv4>
    <config>
      <ip-access-list-name>WORD</ip-access-list-name> <!-- operation="delete"-->
    </config>
  </ipv4>
</match-condition>
</routemap>
</routemaps>
```

### Command Syntax

```
match ip address WORD
```

---

## Configure ip prefix list name

Use this attribute to match entries of a prefix-list. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

Attribute Name: ip-prefix-list-name

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
  </match-condition>
  <ipv4>
    <config>
      <ip-prefix-list-name>WORD</ip-prefix-list-name> <!-- operation="delete"-->
    </config>
  </ipv4>
</match-condition>
</routemap>
</routemaps>
```

```

    </config>
    <routermap-name>WORD</routermap-name>
  <match-condition>
    <ipv4>
      <config>
        <ip-prefix-list-name>WORD</ip-prefix-list-name> <!-- operation="delete"-->
      </config>
    </ipv4>
  </match-condition>
</routermap>
</routermaps>

```

### Command Syntax

```
match ip address prefix-list WORD
```

---

## Configure peer access list name

Use this attribute to specify the match peer IPv4 address of a route.

Attribute Name: peer-access-list-name

Attribute Type: string

### Netconf edit-config payload

```

<routermaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routermap">
  <routermap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routermap-name>WORD</routermap-name>
    </config>
    <routermap-name>WORD</routermap-name>
  <match-condition>
    <ipv4>
      <config>
        <peer-access-list-name>WORD</peer-access-list-name> <!-- operation="delete"-->
      </config>
    </ipv4>
  </match-condition>
</routermap>
</routermaps>

```

### Command Syntax

```
match ip peer WORD
```

---

## Configure next hop prefix list name

Use this attribute to specify the next-hop IP address match criterion using the prefix-list. This command matches the next-hop IP address of a route.

Attribute Name: next-hop-prefix-list-name

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <ipv4>
      <config>
        <next-hop-prefix-list-name>WORD</next-hop-prefix-list-name> <!--
operation="delete"-->
      </config>
    </ipv4>
  </match-condition>
</routemap>
</routemaps>
```

### Command Syntax

```
match ip next-hop prefix-list WORD
```

## Configure next hop access list name

Use this attribute to specify a next-hop address to be matched in a route-map. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

Attribute Name: next-hop-access-list-name

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <ipv4>
      <config>
        <next-hop-access-list-name>WORD</next-hop-access-list-name> <!--
operation="delete"-->
      </config>
    </ipv4>
  </match-condition>
</routemap>
</routemaps>
```

```

</match-condition>
</routemap>
</routemaps>

```

## Command Syntax

```
match ip next-hop WORD
```

---

## Configure ipv6 address access list name

Use this attribute to specify the match address of route. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables

This command is supported when following feature are enabled IPV6 feature

Attribute Name: ipv6-address-access-list-name

Attribute Type: string

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <ipv6>
      <config>
        <ipv6-address-access-list-name>WORD</ipv6-address-access-list-name> <!--
operation="delete"-->
      </config>
    </ipv6>
  </match-condition>
</routemap>
</routemaps>

```

## Command Syntax

```
match ipv6 address WORD
```

---

## Configure ipv6 prefix list name

Use this attribute to match entries of a prefix-list. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes, depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: ipv6-prefix-list-name

Attribute Type: string

**Netconf edit-config payload**

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <ipv6>
      <config>
        <ipv6-prefix-list-name>WORD</ipv6-prefix-list-name> <!-- operation="delete"-->
      </config>
    </ipv6>
  </match-condition>
</routemap>
</routemaps>

```

**Command Syntax**

```
match ipv6 address prefix-list WORD
```

**Configure routemap name**

Use this attribute to specify the match peer IPv6 address of a route.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: peer-access-list-name

Attribute Type: string

**Netconf edit-config payload**

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <ipv6>
      <config>
        <peer-access-list-name>WORD</peer-access-list-name> <!-- operation="delete"-->
      </config>
    </ipv6>
  </match-condition>
</routemap>
</routemaps>

```

## Command Syntax

```
match ipv6 peer WORD
```

---

## Configure sequence id

Use this attribute to match entries of a prefix-list. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: next-hop-prefix-list-name

Attribute Type: string

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <match-condition>
    <ipv6>
      <config>
        <next-hop-prefix-list-name>WORD</next-hop-prefix-list-name> <!--
operation="delete"-->
      </config>
    </ipv6>
  </match-condition>
</routemap>
</routemaps>
```

## Command Syntax

```
match ipv6 next-hop prefix-list WORD
```

---

## Configure next hop match string

Use this attribute to specify the next-hop address to be matched. The route specified by the policies might not be the same as specified by the routing protocols. Setting policies enable packets to take different routes depending on their length or content. Packet forwarding based on configured policies overrides packet forwarding specified in routing tables.

This command is supported when following feature are enabled IPV6 feature

Attribute Name: next-hop-match-string

Attribute Type: union

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
```



```

<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
</match-condition>
<ipv6>
<config>
  <next-hop-match-string>RMAP_IPV6_NEXTHOP_T</next-hop-match-string>
</config>
</ipv6>
</match-condition>
</routemap>
</routemaps>

```

## Command Syntax

```
match ipv6 next-hop (WORD|X:X::X:X)
```

---

## Configure large community number match

Use this attributes to set the communities attribute. and group destinations in a certain community, as well as apply routing decisions according to those communities.

Attribute Name: large-community-number-match

Attribute Type: string

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  </match-condition>
  <large-match-community>
    <config>
      <large-community-number-match>XXX:YYYY:ZZZ</large-community-number-match> <!--
- operation="delete"-->
    </config>
  </large-match-community>
</match-condition>
</routemap>
</routemaps>

```

## Command Syntax

```
match large-community XXX:YYYY:ZZZ
```

## Configure metric value

Use this command to set a metric value for a route and influence external neighbors about the preferred path into an Autonomous System (AS). The preferred path is the one with a lower metric value. A router compares metrics for paths from neighbors in the same ASs. To compare metrics from neighbors coming from different ASs, use the `bgp always-compare-med` command. To use this command, you must first have a match clause. Match and set commands set the conditions for redistributing routes from one routing protocol to another. The match command specifies the match criteria under which redistribution is allowed for the current route-map. The set command specifies the set redistribution actions to be performed, if the match criteria are met. If the packets do not match any of the defined criteria, they are routed through the normal routing process.

Attribute Name: `metric-value`

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <config>
      <metric-value>WORD</metric-value> <!-- operation="delete"-->
    </config>
  </set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set metric WORD
```

## Configure forward interface type

Use this attributes to discard routes based on policy/rules configured for a route map. Route maps can be applied to BGP neighbors. When this command is given for a route map and that route map is applied to a BGP neighbor, the discard route entries are added by BGP for the prefix permitted by the route map.

Attribute Name: `forward-interface-type`

Attribute Type: enum (null|tunnel-te)

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
```

```

    <routermap-name>WORD</routermap-name>
  <set-action>
  <config>
    <forward-interface-type>null0</forward-interface-type> <!--
operation="delete"-->
  </config>
</set-action>
</routermap>
</routermaps>

```

## Command Syntax

```
set interface (null0|tunnel-te)
```

---

## Configure route tag

Use this attribute to set a tag value. The parameter is the route tag that is labeled by another routing protocol (BGP or other IGP when redistributing), because AS-external-LSA has a route-tag field in its LSAs. In addition, when using route-map, OcNOS can tag the LSAs with the appropriate tag value. Sometimes the tag matches with using route-map, and sometimes, the value may be used by another application.

Attribute Name: route-tag

Attribute Type: uint32

Attribute Range: 1-4294967295

## Netconf edit-config payload

```

<routermaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routermap">
  <routermap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routermap-name>WORD</routermap-name>
    </config>
    <routermap-name>WORD</routermap-name>
  <set-action>
  <config>
    <route-tag>1</route-tag> <!-- operation="delete"-->
  </config>
</set-action>
</routermap>
</routermaps>

```

## Command Syntax

```
set tag <1-4294967295>
```

---

## Configure weight

Use this attribute to set weights for the routing table. The weight value is used to assist in best path selection. It is assigned locally to a router. When there are several routes with a common destination, the routes with a higher weight value are preferred. To use this command, you must first have a match clause. Match and set commands set the conditions for redistributing routes from one routing protocol to another. The match command specifies the match

criteria under which redistribution is allowed for the current route-map. The set command specifies the set redistribution actions to be performed, if the match criteria are met.

Attribute Name: weight

Attribute Type: uint32

Attribute Range: 0-65535

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<set-action>
<config>
  <weight>0</weight> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set weight <0-65535>
```

---

## Configure local preference

Use this attribute to set the BGP local preference path attribute

Attribute Name: local-preference

Attribute Type: uint32

Attribute Range: 0-4294967295

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<set-action>
<config>
  <local-preference>0</local-preference> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
```

```
</routemaps>
```

## Command Syntax

```
set local-preference <0-4294967295>
```

---

## Configure route origin type

Use this command to set the BGP origin code. The origin attribute defines the origin of the path information. To use this command, you must first have a match clause. Match and set commands set the conditions for redistributing routes from one routing protocol to another. The match command specifies the match criteria under which redistribution is allowed for the current route-map. The set command specifies the set redistribution actions to be performed, if the match criteria are met. If the packets do not match any of the defined criteria, they are routed through the normal routing process.

Attribute Name: route-origin-type

Attribute Type: enum (egp|igp|incomplete)

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<set-action>
<config>
  <route-origin-type>egp</route-origin-type> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>
```

## Command Syntax

```
set origin (egp|igp|incomplete)
```

---

## Configure metric type

Use this command to set the metric type for the destination routing protocol. Select a type to be either Type-1 or Type2 in the AS-external-LSA when the route-map matches the condition.

Attribute Name: metric-type

Attribute Type: enum (type-1|type-2|internal|external)

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
```

```

        <sequence-id>1</sequence-id>
        <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
<set-action>
<config>
    <metric-type>type-1</metric-type> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>

```

### Command Syntax

```
set metric-type (type-1|type-2|internal|external)
```

---

## Configure aigp metric

Use this command to set the AIGP metric for BGP protocol routes.

Attribute Name: aigp-metric

Attribute Type: union

### Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
    <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
        <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
<set-action>
<config>
    <aigp-metric>igp-metric</aigp-metric> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>

```

### Command Syntax

```
set aigp-metric (igp-metric|<1-4294967295>)
```

---

## Configure level type

Use this attribute to set the IS-IS level to export a route.

Attribute Name: level-type

Attribute Type: enum (level-1|level-2|level-1-2)

**Netconf edit-config payload**

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<set-action>
<config>
  <level-type>level-1</level-type> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>
```

**Command Syntax**

```
set level (level-1|level-2|level-1-2)
```

---

**Configure enable as path tag**

Use this command to modify an autonomous system path for a route. By specifying the length of the AS-Path, the router influences the best path selection by a neighbor

Attribute Name: enable-as-path-tag

Attribute Type: empty

**Netconf edit-config payload**

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
<set-action>
<config>
  </enable-as-path-tag><!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>
```

**Command Syntax**

```
set as-path tag
```

---

## Configure atomic aggregate

Use this attribute to set an atomic aggregate attribute. To use this command, you must first have a match clause. Match and set commands set the conditions for redistributing routes from one routing protocol to another. The match command specifies the match criteria under which redistribution is allowed for the current route-map. The set command specifies the set redistribution actions to be performed, if the match criteria are met. If the packets do not match any of the defined criteria, they are routed through the normal routing process.

Attribute Name: atomic-aggregate

Attribute Type: empty

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <config>
      </atomic-aggregate><!-- operation="delete"-->
    </config>
  </set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set atomic-aggregate
```

---

## Configure delete community value

Use this attribute to delete the matched communities from the community attribute of an inbound or outbound update when applying route-map.

Attribute Name: delete-community-value

Attribute Type: union

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <config>
```



```

        <delete-community-value>RMAP_COMMUNITY_STRING_T</delete-community-value>
    </config>
</set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set comm-list (WORD|<1-99>|<100-500>) delete
```

---

## Configure bgp originator id

Use this command to set the originator ID attribute. To use this command, you must first have a match clause. Match and set commands set the conditions for redistributing routes from one routing protocol to another. The match command specifies the match criteria under which redistribution is allowed for the current route-map. The set command specifies the set redistribution actions to be performed, if the match criteria are met. If the packets do not match any of the defined criteria, they are routed through the normal routing process.

Attribute Name: bgp-originator-id

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <config>
      <bgp-originator-id>A.B.C.D</bgp-originator-id> <!-- operation="delete"-->
    </config>
  </set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set originator-id A.B.C.D
```

---

## Configure as path prepend

Use this attributes to modify an autonomous system path for a route. By specifying the length of the AS-Path, the router influences the best path selection by a neighbor. Use this command to prepend an AS path string to routes increasing the AS path length. To use this command, you must first give the match and set commands configure the conditions for redistributing routes from one routing protocol to another: 1. The match command specifies the match criteria under which redistribution is allowed for the current route-map. 2. The set command specifies the set redistribution actions to be performed if the match criteria are met. If the packets do not match any of the defined criteria, they are routed through the normal routing process.

Attribute Name: as-path-prepend

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
</set-action>
<config>
  <as-path-prepend>1</as-path-prepend> <!-- operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set as-path prepend .<1-4294967295>
```

---

## Configure ext community site of origin

Use this attribute to set an extended community attribute as Site-of-origin extended community.

Attribute Name: ext-community-site-of-origin

Attribute Type: string

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
<routemap>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routemap-name>WORD</routemap-name>
  </config>
  <routemap-name>WORD</routemap-name>
</set-action>
<config>
  <ext-community-site-of-origin>AA:NN</ext-community-site-of-origin> <!--
operation="delete"-->
</config>
</set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set extcommunity soo .AA:NN
```

---

## Configure ext community color

Use this attribute to set an extended community attribute color value

Attribute Name: ext-community-color

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <config>
      <ext-community-color>1</ext-community-color> <!-- operation="delete"-->
    </config>
  </set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set extcommunity color <1-4294967295>
```

---

## Configure ip nexthop address

Use this attribute to set the specified next-hop value.

Attribute Name: ip-nexthop-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <ipv4>
      <config>
        <ip-nexthop-address>A.B.C.D</ip-nexthop-address> <!-- operation="delete"-->
      </config>
    </ipv4>
  </set-action>
</routemap>
</routemaps>
```

```

</set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set ip next-hop A.B.C.D
```

---

## Configure use peer address

Use this attribute to set the next hop value as BGP peer-address

Attribute Name: use-peer-address

Attribute Type: empty

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <ipv4>
      <config>
        </use-peer-address><!-- operation="delete"-->
      </config>
    </ipv4>
  </set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set ip next-hop peer-address
```

---

## Configure vpnv4 nexthop address

Use this command to set a VPNv4 next-hop address. To use this command, you must first have a match clause. Match and set commands set the conditions for redistributing routes from one routing protocol to another. The match command specifies the match criteria under which redistribution is allowed for the current route-map. The set command specifies the set redistribution actions to be performed, if the match criteria are met. If the packets do not match any of the defined criteria, they are routed through the normal routing process.

Attribute Name: vpnv4-nexthop-address

Attribute Type: inet:ipv4-address

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>

```

```

    <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
    <routermap-name>WORD</routermap-name>
  </config>
  <routermap-name>WORD</routermap-name>
<set-action>
<ipv4>
<config>
  <vpn4-nexthop-address>A.B.C.D</vpn4-nexthop-address> <!--
operation="delete"-->
</config>
</ipv4>
</set-action>
</routermap>
</routermaps>

```

### Command Syntax

```
set vpnv4 next-hop A.B.C.D
```

---

## Configure ipv6 nexthop address

Use this attribute to set a next hop-address.

Attribute Name: ipv6-nexthop-address

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```

<routermaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routermap">
  <routermap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routermap-name>WORD</routermap-name>
    </config>
    <routermap-name>WORD</routermap-name>
  <set-action>
  <ipv6>
  <config>
    <ipv6-nexthop-address>X:X::X:X</ipv6-nexthop-address> <!--
operation="delete"-->
  </config>
  </ipv6>
  </set-action>
  </routermap>
</routermaps>

```

### Command Syntax

```
set ipv6 next-hop X:X::X:X
```

---

## Configure local ipv6 nexthop address

Use this attribute to set Local IPv6 address as next hop-address

Attribute Name: local-ipv6-nexthop-address

Attribute Type: inet:ipv6-address

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <ipv6>
      <config>
        <local-ipv6-nexthop-address>X:X::X:X</local-ipv6-nexthop-address> <!--
operation="delete"-->
      </config>
    </ipv6>
  </set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set ipv6 next-hop local X:X::X:X
```

---

## Configure aggregator ip address

IP address of aggregator.

Attribute Name: aggregator-ip-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <bgp-aggregator-attributes>
      <bgp-aggregator-attribute> <!-- operation="delete"-->
        <aggregator-ip-address>A.B.C.D</aggregator-ip-address>
      </bgp-aggregator-attribute>
    </bgp-aggregator-attributes>
  </set-action>
</routemap>
</routemaps>
```

```

    <config>
      <aggregator-ip-address>A.B.C.D</aggregator-ip-address>
      <as-number>1</as-number>
    </config>
    <as-number>1</as-number>
  </bgp-aggregator-attribute>
</bgp-aggregator-attributes>
</set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set aggregator as <1-4294967295> A.B.C.D
```

---

## Configure ext community rt

use this attribute to set an Route target extended community

Attribute Name: ext-community-rt

Attribute Type: string

Attribute Range: 1-255

Attribute Name: additive-type

Attribute Type: enum (no-additive|additive)

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  </set-action>
  <extended-community>
    <route-targets>
      <route-target> <!-- operation="delete"-->
        <ext-community-rt>AA:NN</ext-community-rt>
        <config>
          <ext-community-rt>AA:NN</ext-community-rt>
          <additive-type>no-additive</additive-type>
        </config>
      </route-target>
    </route-targets>
  </extended-community>
</set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set extcommunity rt .AA:NN ((additive)|)
```

---

## Configure cost value

use this attribute to set Extended community cost value

Attribute Name: cost-value

Attribute Type: uint32

Attribute Range: 0-4294967295

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <extended-community>
      <costs>
        <cost> <!-- operation="delete"-->
          <cost-value>0</cost-value>
          <config>
            <cost-value>0</cost-value>
            <community-id>0</community-id>
            <comparison-type>no-comparision</comparison-type>
          </config>
            <community-id>0</community-id>
            <comparison-type>no-comparision</comparison-type>
        </cost>
      </costs>
    </extended-community>
  </set-action>
</routemap>
</routemaps>
```

## Command Syntax

```
set extcommunity cost (igp|pre-bestpath|) <0-255> <0-4294967295>
```

---

## Configure max suppress time limit

Maximum duration to suppress a stable route in minutes.

Attribute Name: max-suppress-time-limit

Attribute Type: uint8

Default Value: 60



Attribute Range: 1-255

Attribute Name: enable-dampening

Attribute Type: empty

Attribute Name: reachability-half-life-time

Attribute Type: uint8

Default Value: 15

Attribute Range: 1-45

Attribute Name: reuse-time-limit

Attribute Type: uint16

Default Value: 750

Attribute Range: 1-20000

Attribute Name: suppress-time-limit

Attribute Type: uint16

Default Value: 2000

Attribute Range: 1-20000

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <dampening>
      <config>
        </enable-dampening><!-- operation="delete"-->
        <reachability-half-life-time>1</reachability-half-life-time> <!--
operation="delete"-->
        <reuse-time-limit>1</reuse-time-limit> <!-- operation="delete"-->
        <suppress-time-limit>1</suppress-time-limit> <!-- operation="delete"-->
        <max-suppress-time-limit>1</max-suppress-time-limit> <!-- operation="delete"-
->
      </config>
    </dampening>
  </set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set dampening <1-45> <1-20000> <1-20000> <1-255>
```

---

## Configure unreachable half life time

Un-reachability half-life time for the penalty in minutes.

Attribute Name: unreachable-half-life-time

Attribute Type: uint8

Default Value: 15

Attribute Range: 1-45

Attribute Name: enable-dampening

Attribute Type: empty

Attribute Name: reachability-half-life-time

Attribute Type: uint8

Default Value: 15

Attribute Range: 1-45

Attribute Name: reuse-time-limit

Attribute Type: uint16

Default Value: 750

Attribute Range: 1-20000

Attribute Name: suppress-time-limit

Attribute Type: uint16

Default Value: 2000

Attribute Range: 1-20000

Attribute Name: max-suppress-time-limit

Attribute Type: uint8

Default Value: 60

Attribute Range: 1-255

## Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <dampening>
      <config>
        </enable-dampening><!-- operation="delete"-->
        <reachability-half-life-time>1</reachability-half-life-time> <!--
operation="delete"-->
        <reuse-time-limit>1</reuse-time-limit> <!-- operation="delete"-->
      </config>
    </dampening>
  </set-action>
</routemap>
</routemaps>
```

```

        <suppress-time-limit>1</suppress-time-limit> <!-- operation="delete"-->
        <max-suppress-time-limit>1</max-suppress-time-limit> <!-- operation="delete"-->
->
        <unreachability-half-life-time>1</unreachability-half-life-time> <!--
operation="delete"-->
    </config>
</dampening>
</set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set dampening <1-45> <1-20000> <1-20000> <1-255> <1-45>
```

## Configure enable dampening

Use this attribute to enable route dampening and set various parameters. Route dampening minimizes the instability caused by route flapping. A penalty is added for every flap in a flapping route. As soon as the total penalty reaches the suppress limit the advertisement of the route is suppressed. This penalty is decayed according to the configured half time value. Once the penalty is lower than the reuse limit, the route advertisement is unsuppressed. The dampening information is purged from the router once the penalty becomes less than half of the reuse limit. Reachability half-life time for the penalty in minutes. The time for the penalty to decrease to one-half of its current value.

Attribute Name: enable-dampening

Attribute Type: empty

## Netconf edit-config payload

```

<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <dampening>
      <config>
        </enable-dampening>
      </config>
    </dampening>
  </set-action>
</routemap>
</routemaps>

```

## Command Syntax

```
set dampening
```

---

## Configure community with as number

Autonomous system (AS) number and network number entered in the 4-byte new community format. This value is configured with two 2-byte numbers separated by a colon. A number from 1 to 65535 can be entered as each 2-byte number. A single community can be entered or multiple communities can be entered, each separated by a space.

Attribute Name: community-with-as-number

Attribute Type: string

Attribute Name: additive-set

Attribute Type: empty

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
      <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
  <set-action>
    <communities>
      <config>
        </additive-set><!-- operation="delete"-->
        <community-with-as-number>AA:NN</community-with-as-number> <!--
operation="delete"-->
      </config>
    </communities>
  </set-action>
</routemap>
</routemaps>
```

### Command Syntax

```
set community-additive .AA:NN
```

---

## Configure large community number set

Use this attributes to set the communities attribute. and group destinations in a certain community, as well as apply routing decisions according to those communities.

Attribute Name: large-community-number-set

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```
<routemaps xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-routemap">
  <routemap>
    <sequence-id>1</sequence-id>
    <config>
```

```

        <sequence-id>1</sequence-id>
        <routemap-name>WORD</routemap-name>
    </config>
    <routemap-name>WORD</routemap-name>
<set-action>
<large-community>
<config>
    <large-community-number-set>XXX:YYYY:ZZZ</large-community-number-set> <!--
operation="delete"-->
</config>
</large-community>
</set-action>
</routemap>
</routemaps>

```

### Command Syntax

```
set large-community XXX:YYYY:ZZZ
```

---

## IPI-DCB

---

### Configure dcb enabled

Enable Data-Center-Bridging

Attribute Name: dcb-enabled

Attribute Type: boolean

### Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<bridges>
<bridge>
    <bridge-id>1</bridge-id>
    <config>
        <bridge-id>1</bridge-id>
    </config>
    <dcb-enabled>true</dcb-enabled> <!-- operation="delete"-->
</bridge>
</bridges>
</dcb>

```

### Command Syntax

```
data-center-bridging enable bridge <1-32>
```

---

### Configure bridge id

Enable Data-Center-Bridging

Attribute Name: dcb-enabled

Attribute Type: boolean

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <bridges>
    <bridge>
      <bridge-id>1</bridge-id>
      <config>
        <bridge-id>1</bridge-id>
      </config>
      <dcb-enabled>true</dcb-enabled> <!-- operation="delete"-->
    </bridge>
  </bridges>
</dcb>
```

### Command Syntax

```
data-center-bridging disable bridge <1-32>
```

---

## Configure enable ets

Enhanced-Transmission-Selection

Attribute Name: enable-ets

Attribute Type: uint8

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <bridges>
    <bridge>
      <bridge-id>1</bridge-id>
      <config>
        <bridge-id>1</bridge-id>
        </enable-ets><!-- operation="delete"-->
      </config>
    </bridge>
  </bridges>
</dcb>
```

### Command Syntax

```
enhanced-transmission-selection enable bridge <1-32>
```

---

## Configure enable application priority

enable Application-Priority

Attribute Name: enable-application-priority

Attribute Type: uint8

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
```

```

<bridges>
<bridge>
  <bridge-id>1</bridge-id>
  <config>
    <bridge-id>1</bridge-id>
  </config>
  </enable-application-priority><!-- operation="delete"-->
</bridge>
</bridges>
</dcb>

```

### Command Syntax

```
application-priority enable bridge <1-32>
```

---

## Configure enable pfc

enable Priority-Flow-Control

This command is supported when following feature are enabled DCB feature

Attribute Name: enable-pfc

Attribute Type: empty

### Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<bridges>
<bridge>
  <bridge-id>1</bridge-id>
  <config>
    <bridge-id>1</bridge-id>
  </config>
  </enable-pfc><!-- operation="delete"-->
</bridge>
</bridges>
</dcb>

```

### Command Syntax

```
priority-flow-control enable bridge <1-32>
```

---

## Configure enabled

Use this attribute to enable QCN for a bridge

Attribute Name: enabled

Attribute Type: uint8

Attribute Name: cnm-transmit-priority

Attribute Type: uint8

Default Value: 6

Attribute Range: 0-7

**Netconf edit-config payload**

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <bridges>
    <bridge>
      <bridge-id>1</bridge-id>
      <config>
        <bridge-id>1</bridge-id>
      </config>
    </bridge>
  </bridges>
  <qcn>
    <config>
      <cnm-transmit-priority>0</cnm-transmit-priority>
      </enabled>
    </config>
  </qcn>
</dcb>
```

**Command Syntax**

```
qcn enable bridge <1-32> (cnm-transmit-priority <0-7>|)
```

**Configure priority value**

Use this attribute to configure cnpv defense priority value

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: qcn-mode

Attribute Type: enum (admin|auto|component)

**Netconf edit-config payload**

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <bridges>
    <bridge>
      <bridge-id>1</bridge-id>
      <config>
        <bridge-id>1</bridge-id>
      </config>
    </bridge>
  </bridges>
  <qcn>
    <cnpv-defenses>
      <cnpv-defense> <!-- operation="delete"-->
        <priority-value>0</priority-value>
        <config>
          <priority-value>0</priority-value>
          <qcn-mode>admin</qcn-mode>
        </config>
      </cnpv-defense>
    </cnpv-defenses>
  </qcn>
</dcb>
```



```

</qcn>
</bridge>
</bridges>
</dcb>

```

## Command Syntax

```
defense-mode cnpv <0-7> (auto)
```

---

## Configure qcn mode

Use this attribute to configure cnpv defense priority value

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: qcn-mode

Attribute Type: enum (admin|auto|component)

Attribute Name: admin-defense-mode

Attribute Type: enum (disabled|interior|interior-ready|edge)

Attribute Name: alternate-priority

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <bridges>
    <bridge>
      <bridge-id>1</bridge-id>
      <config>
        <bridge-id>1</bridge-id>
      </config>
    </bridge>
  </bridges>
  <qcn>
    <cnpv-defenses>
      <cnpv-defense <!-- operation="delete"-->
        <priority-value>0</priority-value>
        <config>
          <priority-value>0</priority-value>
          <qcn-mode>admin</qcn-mode>
          <admin-defense-mode>disabled</admin-defense-mode>
          <alternate-priority>0</alternate-priority>
        </config>
      </cnpv-defense>
    </cnpv-defenses>
  </qcn>
</dcb>

```

---

## Command Syntax

```
defense-mode cnpv <0-7> (admin) (disabled|interior|interior-ready|edge) alternate-  
priority <0-7>
```

---

## Configure enable

This attribute enables debugging for DCB

Attribute Name: enable

Attribute Type: uint8

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">  
<debug>  
<config>  
  </enable><!-- operation="delete"-->  
</config>  
</debug>  
</dcb>
```

## Command Syntax

```
debug dcb on
```

---

# IPI-DCB-INTERFACE

---

## Configure pfc mode

Enable Data-Center-Bridging

This command is supported when following feature are enabled DCB feature

Attribute Name: pfc-mode

Attribute Type: enum (on|auto)

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">  
<interfaces>  
<interface>  
  <name>WORD</name>  
  <config>  
    <name>WORD</name>  
  </config>  
  <pfc-mode>on</pfc-mode> <!-- operation="delete"-->  
</interface>  
</interfaces>  
</dcb>
```

---

## Command Syntax

```
priority-flow-control mode (on|auto)
```

---

## Configure ets mode

Use this attribute to set Enhanced Transmission Selection mode

This command is supported when following feature are enabled DCB feature

Attribute Name: ets-mode

Attribute Type: enum (on|auto)

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <ets-mode>on</ets-mode> <!-- operation="delete"-->
    </interface>
  </interfaces>
</dcb>
```

## Command Syntax

```
enhanced-transmission-selection mode (on|auto)
```

---

## Configure priority value

Use this attribute to configure cnpv defense priority value

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: qcn-mode

Attribute Type: enum (admin|auto|component)

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <qcn>
        <cnpv-defenses>
          <cnpv-defense> <!-- operation="delete"-->
        </cnpv-defenses>
      </qcn>
    </interface>
  </interfaces>
</dcb>
```

```

    <priority-value>0</priority-value>
  <config>
    <priority-value>0</priority-value>
    <qcn-mode>admin</qcn-mode>
  </config>
</cnpv-defense>
</cnpv-defenses>
</qcn>
</interface>
</interfaces>
</dcb>

```

## Command Syntax

```
defense-mode cnpv <0-7> (auto|component)
```

---

## Configure name

Use this attribute to configure cnpv defense priority value

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: qcn-mode

Attribute Type: enum (admin|auto|component)

Attribute Name: admin-defense-mode

Attribute Type: enum (disabled|interior|interior-ready|edge)

Attribute Name: alternate-priority

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <qcn>
    <cnpv-defenses>
    <cnpv-defense> <!-- operation="delete"-->
      <priority-value>0</priority-value>
      <config>
        <priority-value>0</priority-value>
        <qcn-mode>admin</qcn-mode>
        <admin-defense-mode>disabled</admin-defense-mode>
        <alternate-priority>0</alternate-priority>
      </config>
    </cnpv-defense>
  </cnpv-defenses>
</qcn>
</interface>
</interfaces>
</dcb>

```

```

    </config>
  </cnpv-defense>
</cnpv-defenses>
</qcn>
</interface>
</interfaces>
</dcb>

```

## Command Syntax

```

defense-mode cnpv <0-7> (admin) (disabled|interior|interior-ready|edge) alternate-
priority <0-7>

```

---

## Configure cnpv value

Use this attribute to configure cnpv value

Attribute Name: cnpv-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: sample-base

Attribute Type: uint32

Attribute Range: 1024-10240

Attribute Name: weight

Attribute Type: int8

## Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <qcn>
      <congestion-points>
        <congestion-point> <!-- operation="delete"-->
          <cnpv-value>0</cnpv-value>
          <config>
            <cnpv-value>0</cnpv-value>
            <sample-base>1024</sample-base>
            <weight>WEIGHT</weight>
          </config>
        </congestion-point>
      </congestion-points>
      </qcn>
    </interface>
  </interfaces>
</dcb>

```

## Command Syntax

```
cp enable cnpv <0-7> (sample-base <1024-10240>|) (weight WEIGHT|)
```

---

## Configure weight

Use this attribute to configure weight

This command is supported when following feature are enabled DCB feature

Attribute Name: weight

Attribute Type: int8

Attribute Name: sample-base

Attribute Type: uint32

Attribute Range: 1024-10240

## Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <qcn>
        <congestion-points>
          <congestion-point>
            <cnpv-value>0</cnpv-value>
            <config>
              <cnpv-value>0</cnpv-value>
              <sample-base>1024</sample-base> <!-- operation="delete"-->
            </config>
            <weight>WEIGHT</weight> <!-- operation="delete"-->
          </congestion-point>
        </congestion-points>
      </qcn>
    </interface>
  </interfaces>
</dcb>
```

## Command Syntax

```
cp enable cnpv <0-7> (sample-base <1024-10240>|) (weight WEIGHT|)
```

---

## Configure accept peer config

Use this attribute to accept peer configuration

This command is supported when following feature are enabled DCB feature

Attribute Name: accept-peer-config

Attribute Type: empty

**Netconf edit-config payload**

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <priority-flow-control>
  <config>
    </accept-peer-config><!-- operation="delete"-->
  </config>
</priority-flow-control>
</interface>
</interfaces>
</dcb>
```

**Command Syntax**

```
priority-flow-control accept-peer-config
```

---

**Configure advertise local config**

Use this attribute to advertise local configuration to peer

This command is supported when following feature are enabled DCB feature

Attribute Name: advertise-local-config

Attribute Type: empty

**Netconf edit-config payload**

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <priority-flow-control>
  <config>
    </advertise-local-config><!-- operation="delete"-->
  </config>
</priority-flow-control>
</interface>
</interfaces>
</dcb>
```

**Command Syntax**

```
priority-flow-control advertise-local-config
```

---

## Configure cap

Use this attribute to set cap value

This command is supported when following feature are enabled DCB feature

Attribute Name: cap

Attribute Type: uint8

Attribute Range: 0-8

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <priority-flow-control>
        <config>
          <cap>0</cap> <!-- operation="delete"-->
        </config>
      </priority-flow-control>
    </interface>
  </interfaces>
</dcb>
```

### Command Syntax

```
priority-flow-control cap <0-8>
```

---

## Configure link delay allowance

Use this attribute to set link delay allowance

This command is supported when following feature are enabled DCB feature

Attribute Name: link-delay-allowance

Attribute Type: uint32

Attribute Range: 0-65535

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <priority-flow-control>
        <config>
```



```

        <link-delay-allowance>0</link-delay-allowance> <!-- operation="delete"-->
    </config>
</priority-flow-control>
</interface>
</interfaces>
</dcb>

```

### Command Syntax

```
priority-flow-control link-delay-allowance <0-65535>
```

---

## Configure max traffic class groups

Use this attribute to set maximum traffic class groups

This command is supported when following feature are enabled DCB feature

Attribute Name: max-traffic-class-groups

Attribute Type: uint8

Attribute Range: 0-2

### Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <enhanced-transmission-selection>
    <config>
        <max-traffic-class-groups>0</max-traffic-class-groups> <!--
operation="delete"-->
    </config>
    </enhanced-transmission-selection>
</interface>
</interfaces>
</dcb>

```

### Command Syntax

```
max-traffic-class-group <0-2>
```

---

## Configure bandwidth percentage

Use this attribute to set bandwidth percentage

Attribute Name: bandwidth-percentage

Attribute Type: uint8

Attribute Range: 0-100

**Netconf edit-config payload**

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <enhanced-transmission-selection>
  <traffic-class-groups>
  <traffic-class-group>
    <group-index>0</group-index>
    <config>
      <group-index>0</group-index>
    </config>
    <bandwidth-percentage>0</bandwidth-percentage> <!-- operation="delete"-->
  </traffic-class-group>
</traffic-class-groups>
</enhanced-transmission-selection>
</interface>
</interfaces>
</dcb>

```

**Command Syntax**

```
bandwidth-percentage <0-1> <0-100>
```

---

**Configure enabled**

Use this attribute to enable application priority

This command is supported when following feature are enabled DCB feature

Attribute Name: enabled

Attribute Type: empty

**Netconf edit-config payload**

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <application-priority>
  <config>
    </enabled><!-- operation="delete"-->
  </config>
</application-priority>
</interface>
</interfaces>

```

---

```
</dcb>
```

## Command Syntax

```
application-priority enable
```

---

## Configure protocol type

Use this attribute to set priority value

This command is supported when following feature are enabled DCB feature

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <application-priority>
      <port-mappings>
        <port-mapping> <!-- operation="delete"-->
          <priority-value>0</priority-value>
          <config>
            <priority-value>0</priority-value>
            <port-number>1</port-number>
            <protocol-type>tcp</protocol-type>
          </config>
          <port-number>1</port-number>
          <protocol-type>tcp</protocol-type>
        </port-mapping>
      </port-mappings>
    </application-priority>
  </interface>
</interfaces>
</dcb>
```

## Command Syntax

```
(tcp|udp|both-tcp-udp) port-no <1-1023> priority <0-7>
```

---

## Configure service name

Use this attribute to set priority value of service map

This command is supported when following feature are enabled DCB feature

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <application-priority>
  <service-mappings>
  <service-mapping> <!-- operation="delete"-->
    <priority-value>0</priority-value>
    <config>
      <priority-value>0</priority-value>
      <service-name>PROTOSERV</service-name>
      <protocol-type>tcp</protocol-type>
    </config>
    <service-name>PROTOSERV</service-name>
    <protocol-type>tcp</protocol-type>
  </service-mapping>
</service-mappings>
</application-priority>
</interface>
</interfaces>
</dcb>
```

### Command Syntax

```
(tcp|udp|both-tcp-udp) service-name PROTOSERV priority <0-7>
```

---

## Configure ether name

Use this attribute to configure priority

This command is supported when following feature are enabled DCB feature

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
```

```

<application-priority>
<ethertype-name-mappings>
<ethertype-name-mapping> <!-- operation="delete"-->
  <priority-value>0</priority-value>
  <config>
    <priority-value>0</priority-value>
    <ether-name>ETHERNAME</ether-name>
  </config>
  <ether-name>ip</ether-name>
</ethertype-name-mapping>
</ethertype-name-mappings>
</application-priority>
</interface>
</interfaces>
</dcb>

```

## Command Syntax

```

ethertype name
(ip|x25|arp|g8bpqx25|ieeepup|ieeeeaddrtrans|dec|decdnadumpload|decdnaremoteconsole|decdnarouting|declat|decdiagnostics|rarp|atalkddp|atalkaarp|ipx|ipv6|atmmulti|pppdiscovery|pppsession|atmtransport|ETHERNAME) priority <0-7>

```

## Configure ether value

Use this attribute to configure priority

This command is supported when following feature are enabled DCB feature

Attribute Name: priority-value

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```

<dcb xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dcb">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <application-priority>
  <ethertype-value-mappings>
  <ethertype-value-mapping> <!-- operation="delete"-->
    <priority-value>0</priority-value>
    <config>
      <priority-value>0</priority-value>
      <ether-value>ETHERTYPE</ether-value>
    </config>
    <ether-value>ETHERTYPE</ether-value>
  </ethertype-value-mapping>
</ethertype-value-mappings>

```

```

</application-priority>
</interface>
</interfaces>
</dcb>

```

## Command Syntax

```
ethertype value ETHERTYPE priority <0-7>
```

# IPI-RIP

## Configure options

This attribute enables debugging for RIP

Attribute Name: options

Attribute Type: bits (all|events|packet send|packet recv|packet|packet detail|nsm|rib|bfd)

## Netconf edit-config payload

```

<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <debug>
  <config>
    <options>all</options> <!-- operation="delete"-->
  </config>
</debug>
</rip>

```

## Command Syntax

```
debug rip (all|events|packet send|packet recv|packet|packet detail|nsm|rib|bfd)
```

## Configure split horizon

Use this attribute to controls RIP split-horizon processing on the specified interface.

Attribute Name: split-horizon

Attribute Type: boolean

## Netconf edit-config payload

```

<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
  <interface>
    <name>WORD</name>
    <config>
      <name>WORD</name>
      </config>
      <split-horizon>true</split-horizon> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>

```

---

## Command Syntax

```
ip rip split-horizon
```

---

## Configure name

Use this attribute to controls RIP split-horizon processing on the specified interface.

Attribute Name: split-horizon

Attribute Type: boolean

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <split-horizon>true</split-horizon> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

## Command Syntax

```
no ip rip split-horizon
```

---

## Configure disable receive packet

Use this attribute to configure the interface to enable/disable the reception of RIP packets

Attribute Name: disable-receive-packet

Attribute Type: uint8

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </disable-receive-packet><!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

## Command Syntax

```
no ip rip receive-packet
```

---

## Configure disable send packet

Use this attribute to enable/disable sending RIP packets through current interface

Attribute Name: disable-send-packet

Attribute Type: uint8

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </disable-send-packet><!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

### Command Syntax

```
no ip rip send-packet
```

---

## Configure receive version

Use this attribute to receive specified version of RIP packets on an interface

Attribute Name: receive-version

Attribute Type: enum (1|2|1 2|1-compatible)

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <receive-version>1</receive-version> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

### Command Syntax

```
ip rip receive version (1|2|1 2)
```

---

## Configure send version

Use this attribute to set the version of RIP packets which can be sent from an interface



Attribute Name: send-version

Attribute Type: enum (1|2|1 2|1-compatible)

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <send-version>1</send-version> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

### Command Syntax

```
ip rip send version (1|2|1 2|1-compatible)
```

---

## Configure auth mode

Use this attribute to set the type of authentication mode used for RIP packets

Attribute Name: auth-mode

Attribute Type: enum (text|md5)

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <auth-mode>text</auth-mode> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

### Command Syntax

```
ip rip authentication mode (text|md5)
```

---

## Configure auth string

Use this attribute to set the authentication string or password used by a key

Attribute Name: auth-string

Attribute Type: string

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <auth-string>LINE</auth-string> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

**Command Syntax**

```
ip rip authentication string LINE
```

---

**Configure auth keychain**

Use this attribute to enable RIP authentication on an interface and specify the name of the key chain to be used

Attribute Name: auth-keychain

Attribute Type: string

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <auth-keychain>LINE</auth-keychain> <!-- operation="delete"-->
    </interface>
  </interfaces>
</rip>
```

**Command Syntax**

```
ip rip authentication key-chain LINE
```

---

**Configure rip enabled**

Use this attribute enable a RIP routing process

Attribute Name: rip-enabled

Attribute Type: uint8

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
```

```
</rip-enabled>
</config>
</instance>
</rip>
```

## Command Syntax

```
router rip
```

---

## Configure bfd enable

This feature indicates that the RIP implementation on the system supports BFD

Attribute Name: bfd-enable

Attribute Type: empty

## Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      </bfd-enable><!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

## Command Syntax

```
bfd all-interfaces
```

---

## Configure receive buffer size

Use this attribute to set the RIP UDP receive-buffer size.

Attribute Name: receive-buffer-size

Attribute Type: uint32

Default Value: 32768

Attribute Range: 8192-2147483647

## Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <receive-buffer-size>8192</receive-buffer-size> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

## Command Syntax

```
recv-buffer-size <8192-2147483647>
```

---

## Configure passive interfaces

Disables sending of RIP packets on the specified interface

Attribute Name: passive-interfaces

Attribute Type: string

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <passive-interfaces>IFNAME</passive-interfaces> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

### Command Syntax

```
passive-interface IFNAME
```

---

## Configure static routes

Use this attribute to set static RIP routes

Attribute Name: static-routes

Attribute Type: string

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <static-routes>A.B.C.D/M</static-routes> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

### Command Syntax

```
route A.B.C.D/M
```

---

## Configure neighbors

Specifies the RIP neighbors

Attribute Name: neighbors

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <neighbors>A.B.C.D</neighbors> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

```
</config>
</instance>
</rip>
```

## Command Syntax

```
neighbor A.B.C.D
```

---

## Configure neighbor fall over bfd

Specified the BFD neighbors

Attribute Name: neighbor-fall-over-bfd

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <neighbor-fall-over-bfd>A.B.C.D</neighbor-fall-over-bfd> <!--
operation="delete"-->
    </config>
  </instance>
</rip>
```

## Command Syntax

```
neighbor A.B.C.D fall-over bfd
```

---

## Configure enable cisco metric behavior

Use this attribute to set metric updation behavior as Cisco

Attribute Name: enable-cisco-metric-behavior

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <enable-cisco-metric-behavior>disable</enable-cisco-metric-behavior> <!--
operation="delete"-->
    </config>
  </instance>
</rip>
```

## Command Syntax

```
cisco-metric-behavior (disable|enable)
```

---

## Configure default metric

Set the default metric

Attribute Name: default-metric

Attribute Type: uint8

Default Value: 1

Attribute Range: 1-15

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <default-metric>1</default-metric> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

### Command Syntax

```
default-metric <1-15>
```

---

## Configure version

Use this attribute to set version of routing protocol

Attribute Name: version

Attribute Type: uint8

Default Value: 2

Attribute Range: 1-2

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <version>1</version> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

### Command Syntax

```
version <1-2>
```

---

## Configure distance

Use this attribute to set administrative distance of the RIP for the current RIP instance

Attribute Name: distance

Attribute Type: uint8

Default Value: 120

Attribute Range: 1-255

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <distance>1</distance> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

**Command Syntax**

```
distance <1-255>
```

---

**Configure network interfaces**

Use this attribute to enable routing on an interface

Attribute Name: network-interfaces

Attribute Type: string

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <network-interfaces>IFNAME</network-interfaces> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

**Command Syntax**

```
network IFNAME
```

---

**Configure network routes**

Use this attribute to enable routing on an IP network

Attribute Name: network-routes

Attribute Type: string

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <config>
      <network-routes>A.B.C.D/M</network-routes> <!-- operation="delete"-->
    </config>
  </instance>
</rip>
```

**Command Syntax**

```
network A.B.C.D/M
```

---

## Configure access list name

Use this attribute to set the access list name

Attribute Name: access-list-name

Attribute Type: string

Attribute Name: distance

Attribute Type: uint8

Attribute Range: 1-255

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <distances>
      <distance>
        <source-prefix>A.B.C.D/M</source-prefix>
        <config>
          <source-prefix>A.B.C.D/M</source-prefix>
          <distance>1</distance>
        </config>
        <access-list-name>WORD</access-list-name>
      </distance>
    </distances>
  </instance>
</rip>
```

### Command Syntax

```
distance <1-255> A.B.C.D/M (WORD|)
```

---

## Configure route table update interval

Interval at which RIP updates are sent

Attribute Name: route-table-update-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

Attribute Name: route-info-timeout-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

Attribute Name: garbage-collection-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
```



```

<timers>
<config>
  <route-info-timeout-interval>5</route-info-timeout-interval>
  <garbage-collection-interval>5</garbage-collection-interval>
  <route-table-update-interval>5</route-table-update-interval>
</config>
</timers>
</instance>
</rip>

```

### Command Syntax

```
timers basic <5-2147483647> <5-2147483647> <5-2147483647>
```

---

## Configure warning threshold percentage

Use this attribute to set the percentage of maximum routes to generate a warning

Attribute Name: warning-threshold-percentage

Attribute Type: uint32

Attribute Range: 1-100

Attribute Name: max-routes

Attribute Type: uint32

Attribute Range: 1-65535

### Netconf edit-config payload

```

<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <maximum-prefix>
      <config>
        <max-routes>1</max-routes> <!-- operation="delete"-->
        <warning-threshold-percentage>1</warning-threshold-percentage> <!--
operation="delete"-->
      </config>
    </maximum-prefix>
  </instance>
</rip>

```

### Command Syntax

```
maximum-prefix <1-65535> (<1-100>|)
```

---

## Configure route type

Use this attribute to redistributes only specified route-type routes matching the specified route type into the RIP routing instance

Attribute Name: route-type

Attribute Type: enum (kernel|connected|static|ospf|isis|bgp)

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <redistribute-policies>
      <redistribute-policy> <!-- operation="delete"-->
        <route-type>kernel</route-type>
        <config>
          <route-type>kernel</route-type>
        </config>
      </redistribute-policy>
    </redistribute-policies>
  </instance>
</rip>
```

**Command Syntax**

```
redistribute (kernel|connected|static|ospf|isis|bgp)
```

---

**Configure route map**

Use this attribute to set the route-map

Attribute Name: route-map

Attribute Type: string

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

**Netconf edit-config payload**

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <redistribute-policies>
      <redistribute-policy>
        <route-type>kernel</route-type>
        <config>
          <route-type>kernel</route-type>
          <metric>0</metric> <!-- operation="delete"-->
        </config>
        <route-map>WORD</route-map> <!-- operation="delete"-->
      </redistribute-policy>
    </redistribute-policies>
  </instance>
</rip>
```

**Command Syntax**

```
redistribute (kernel|connected|static|ospf|isis|bgp) metric <0-16> route-map WORD
```

---

## Configure metric

Metric used for the redistributed route

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <redistribute-policies>
      <redistribute-policy>
        <route-type>kernel</route-type>
        <config>
          <route-type>kernel</route-type>
        </config>
        <metric>0</metric> <!-- operation="delete"-->
      </redistribute-policy>
    </redistribute-policies>
  </instance>
</rip>
```

### Command Syntax

```
redistribute (kernel|connected|static|ospf|isis|bgp) metric <0-16>
```

---

## Configure originate

Use this attribute to apply conditions of the route policy to the default route

Attribute Name: route-map

Attribute Type: string

Attribute Name: originate

Attribute Type: empty

Attribute Name: always-advertise

Attribute Type: empty

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <default-information>
      <config>
        </originate><!-- operation="delete"-->
        </always-advertise><!-- operation="delete"-->
        <route-map>WORD</route-map> <!-- operation="delete"-->
      </config>
    </default-information>
  </instance>
```

```
</rip>
```

## Command Syntax

```
default-information originate (always|) (route-map WORD|)
```

---

## Configure direction

Use this attribute to set the metric value of routing protocol

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

Attribute Name: access-list-name

Attribute Type: string

## Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <offset-lists>
      <offset-list>
        <direction>in</direction>
        <config>
          <direction>in</direction>
          <access-list-name>WORD</access-list-name>
        </config>
        <metric>0</metric>
      </offset-list>
    </offset-lists>
  </instance>
</rip>
```

## Command Syntax

```
offset-list WORD (in|out) <0-16>
```

---

## clear ip rip route (kernel|connected|static|ospf|isis|bgp|rip|all)

Attribute Name: route-type

Attribute Type: enum (kernel|connected|static|ospf|isis|bgp|rip|all)

## Netconf RPC payload

```
<rip-clear-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <route-type>kernel</route-type>
</rip-clear-route>
```

## Command Syntax

```
clear ip rip route (kernel|connected|static|ospf|isis|bgp|rip|all)
```

---

## clear ip rip route A.B.C.D/M

Attribute Name: prefix-address

Attribute Type: string

### Netconf RPC payload

```
<rip-clear-route-prefix xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <prefix-address>A.B.C.D/M</prefix-address>
</rip-clear-route-prefix>
```

### Command Syntax

```
clear ip rip route A.B.C.D/M
```

---

## clear ip rip statistics (IFNAME|)

Attribute Name: name

Attribute Type: string

Default Value: NULL

### Netconf RPC payload

```
<rip-clear-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <name>IFNAME</name>
</rip-clear-statistics>
```

### Command Syntax

```
clear ip rip statistics (IFNAME|)
```

---

## snmp restart rip

### Netconf RPC payload

```
<rip-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip"/>
```

### Command Syntax

```
snmp restart rip
```

---

## debug rip (all|events|packet send|packet recv|packet|packet detail|nsm|rib|bfd)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet send|packet recv|packet|packet detail|nsm|rib|bfd)

### Netconf RPC payload

```
<rip-terminal-debugging-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <terminal-debug-options>all</terminal-debug-options>
</rip-terminal-debugging-on>
```

---

## Command Syntax

```
debug rip (all|events|packet send|packet rcv|packet|packet detail|nsm|rib|bfd)
```

---

## no debug rip (all|events|packet send|packet rcv|packet|packet detail|nsm|rib|bfd)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet send|packet rcv|packet|packet detail|nsm|rib|bfd)

### Netconf RPC payload

```
<rip-terminal-debugging-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <terminal-debug-options>all</terminal-debug-options>
</rip-terminal-debugging-off>
```

## Command Syntax

```
no debug rip (all|events|packet send|packet rcv|packet|packet detail|nsm|rib|bfd)
```

---

## IPI-RIP-VRF

---

### Configure vrf name

VRF name

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf> <!-- operation="delete"-->
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
      </vrf>
    </vrfs>
  </instance>
</rip>
```

## Command Syntax

```
address-family ipv4 vrf NAME
```

---

## Configure enable cisco metric behavior

Use this attribute to set metric updation behavior as Cisco

Attribute Name: enable-cisco-metric-behavior

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <enable-cisco-metric-behavior>disable</enable-cisco-metric-behavior> <!--
operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</rip>
```

### Command Syntax

```
cisco-metric-behavior (disable|enable)
```

---

## Configure default metric

Set the default metric

Attribute Name: default-metric

Attribute Type: uint8

Default Value: 1

Attribute Range: 1-15

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <default-metric>1</default-metric> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</rip>
```

### Command Syntax

```
default-metric <1-15>
```

---

## Configure version

Use this attribute to set version of routing protocol

Attribute Name: version

Attribute Type: uint8

Default Value: 2

Attribute Range: 1-2

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <version>1</version> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</rip>
```

### Command Syntax

```
version <1-2>
```

---

## Configure distance

Use this attribute to set administrative distance of the RIP for the current RIP instance

Attribute Name: distance

Attribute Type: uint8

Default Value: 120

Attribute Range: 1-255

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <distance>1</distance> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</rip>
```



```
</instance>
</rip>
```

## Command Syntax

```
distance <1-255>
```

---

## Configure network interfaces

Use this attribute to enable routing on an interface

Attribute Name: network-interfaces

Attribute Type: string

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <network-interfaces>IFNAME</network-interfaces> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</rip>
```

## Command Syntax

```
network IFNAME
```

---

## Configure network routes

Use this attribute to enable routing on an IP network

Attribute Name: network-routes

Attribute Type: string

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <network-routes>A.B.C.D/M</network-routes> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</rip>
```

```

</vrfs>
</instance>
</rip>

```

## Command Syntax

```
network A.B.C.D/M
```

---

## Configure access list name

Use this attribute to set the access list name

Attribute Name: access-list-name

Attribute Type: string

Attribute Name: distance

Attribute Type: uint8

Attribute Range: 1-255

## Netconf edit-config payload

```

<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <distances>
          <distance>
            <source-prefix>A.B.C.D/M</source-prefix>
            <config>
              <source-prefix>A.B.C.D/M</source-prefix>
              <distance>1</distance>
            </config>
            <access-list-name>WORD</access-list-name>
          </distance>
        </distances>
      </vrf>
    </vrfs>
  </instance>
</rip>

```

## Command Syntax

```
distance <1-255> A.B.C.D/M (WORD|)
```

---

## Configure route type

Use this attribute to redistributes only specified route-type routes matching the specified route type into the RIP routing instance

Attribute Name: route-type

Attribute Type: enum (connected|static|ospf|bgp)

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <redistribute-policies>
          <redistribute-policy> <!-- operation="delete"-->
            <route-type>connected</route-type>
            <config>
              <route-type>connected</route-type>
            </config>
          </redistribute-policy>
        </redistribute-policies>
      </vrf>
    </vrfs>
  </instance>
</rip>
```

### Command Syntax

```
redistribute (connected|static|ospf|bgp)
```

---

## Configure route map

Use this attribute to set the name of the route-map

Attribute Name: route-map

Attribute Type: string

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <redistribute-policies>
```

```

    <redistribute-policy>
      <route-type>connected</route-type>
      <config>
        <route-type>connected</route-type>
        <metric>0</metric> <!-- operation="delete"-->
      </config>
      <route-map>WORD</route-map> <!-- operation="delete"-->
    </redistribute-policy>
  </redistribute-policies>
</vrf>
</vrfs>
</instance>
</rip>

```

### Command Syntax

```
redistribute (connected|static|ospf|bgp) metric <0-16> route-map WORD
```

## Configure metric

Use this attribute to set the metric used for the redistributed route

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

### Netconf edit-config payload

```

<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <redistribute-policies>
          <redistribute-policy>
            <route-type>connected</route-type>
            <config>
              <route-type>connected</route-type>
              <metric>0</metric> <!-- operation="delete"-->
            </config>
          </redistribute-policy>
        </redistribute-policies>
      </vrf>
    </vrfs>
  </instance>
</rip>

```

### Command Syntax

```
redistribute (connected|static|ospf|bgp) metric <0-16>
```

---

## Configure originate

Use this attribute to apply conditions of the route policy to the default route

Attribute Name: route-map

Attribute Type: string

Attribute Name: originate

Attribute Type: empty

Attribute Name: always-advertise

Attribute Type: empty

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <default-information>
          <config>
            </originate><!-- operation="delete"-->
            </always-advertise><!-- operation="delete"-->
            <route-map>WORD</route-map> <!-- operation="delete"-->
          </config>
        </default-information>
      </vrf>
    </vrfs>
  </instance>
</rip>
```

### Command Syntax

```
default-information originate (always|) (route-map WORD|)
```

---

## Configure direction

Use this attribute to set the metric value of routing protocol

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

Attribute Name: access-list-name

Attribute Type: string

### Netconf edit-config payload

```
<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
```

```

<instance>
  <vrfs>
    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
      </config>
      <offset-lists>
        <offset-list>
          <direction>in</direction>
          <config>
            <direction>in</direction>
            <access-list-name>WORD</access-list-name>
          </config>
          <metric>0</metric>
        </offset-list>
      </offset-lists>
    </vrf>
  </vrfs>
</instance>
</rip>

```

## Command Syntax

```
offset-list WORD (in|out) <0-16>
```

---

## Configure name

Use this attribute to set the metric value of routing protocol

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

Attribute Name: access-list-name

Attribute Type: string

## Netconf edit-config payload

```

<rip xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-rip">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <interfaces>
          <interface>
            <name>IFNAME</name>
            <config>
              <name>IFNAME</name>

```

```

    </config>
    <offset-lists>
    <offset-list>
        <direction>in</direction>
        <config>
            <direction>in</direction>
            <access-list-name>WORD</access-list-name>
        </config>
        <metric>0</metric>
    </offset-list>
    </offset-lists>
</interface>
</interfaces>
</vrf>
</vrfs>
</instance>
</rip>

```

### Command Syntax

```
offset-list WORD (in|out) <0-16> IFNAME
```

---

## clear ip rip route vrf NAME A.B.C.D/M

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: prefix

Attribute Type: string

### Netconf RPC payload

```

<ipi-rip-vrf_rip-vrf-clear-route xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-rip">
    <vrf-name>NAME</vrf-name>
    <prefix>A.B.C.D/M</prefix>
</ipi-rip-vrf_rip-vrf-clear-route>

```

### Command Syntax

```
clear ip rip route vrf NAME A.B.C.D/M
```

---

## clear ip rip route vrf NAME \*

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```

<ipi-rip-vrf_rip-vrf-clear-route-all xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-rip">
    <vrf-name>NAME</vrf-name>
</ipi-rip-vrf_rip-vrf-clear-route-all>

```

## Command Syntax

```
clear ip rip route vrf NAME *
```

---

## IPI-SNMP

---

### Configure enable link down trap

Use this attribute to enable or disable SNMP linkdown traps.

Attribute Name: enable-link-down-trap

Attribute Type: boolean

Attribute Name: enable-link-up-trap

Attribute Type: boolean

#### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <config>
      <enable-link-up-trap>true</enable-link-up-trap> <!-- operation="delete"-->
      <enable-link-down-trap>true</enable-link-down-trap> <!-- operation="delete"-->
    </config>
  </server-traps>
</snmp>
```

## Command Syntax

```
snmp-server enable traps link
```

---

### Configure enable link up trap

Use this attribute to enable or disable SNMP linkdown traps.

Attribute Name: enable-link-down-trap

Attribute Type: boolean

Attribute Name: enable-link-up-trap

Attribute Type: boolean

#### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <config>
      <enable-link-up-trap>true</enable-link-up-trap> <!-- operation="delete"-->
      <enable-link-down-trap>true</enable-link-down-trap> <!-- operation="delete"-->
    </config>
  </server-traps>
</snmp>
```



---

## Command Syntax

```
no snmp-server enable traps link
```

---

## Configure include interface name

Use this attribute to include ifname with SNMP linkdown traps.

Attribute Name: include-interface-name

Attribute Type: uint8

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <config>
      </include-interface-name><!-- operation="delete"-->
    </config>
  </server-traps>
</snmp>
```

## Command Syntax

```
snmp-server enable traps link include-interface-name
```

---

## Configure enable traps

Use this attribute to enable or disable SNMP traps and inform requests.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: enable-traps

Attribute Type: bits (snmp authentication|mpls|pw|pwdelete|rsvp|ospf|bgp|isis|vrrp|vxlan|ospf6|mpls3vpn|rib|pim)

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <config>
      <enable-traps>snmp authentication</enable-traps> <!-- operation="delete"-->
    </config>
  </server-traps>
</snmp>
```

## Command Syntax

```
snmp-server enable traps (snmp
  authentication|mpls|pw|pwdelete|rsvp|ospf|bgp|isis|vrrp|vxlan|ospf6|mpls3vpn|ri
  b|pim)
```

---

## Configure enable trap cache

Enables trap caching

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: enable-trap-cache

Attribute Type: empty

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <trap-cache>
      <config>
        </enable-trap-cache>
      </config>
    </trap-cache>
  </server-traps>
</snmp>
```

### Command Syntax

```
snmp-server trap-cache
```

---

## Configure timeout

Sets timeout before sending traps

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: timeout

Attribute Type: int8

Default Value: 10

Attribute Range: 1-20

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <trap-cache>
      <config>
        <timeout>1</timeout> <!-- operation="delete"-->
      </config>
    </trap-cache>
  </server-traps>
</snmp>
```

### Command Syntax

```
timeout <1-20>
```

---

## Configure disable ping

Disables pings to check host reachability

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: disable-ping

Attribute Type: empty

---

**Netconf edit-config payload**

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <trap-cache>
      <config>
        </disable-ping><!-- operation="delete"-->
      </config>
    </trap-cache>
  </server-traps>
</snmp>
```

**Command Syntax**

disable-ping

---

**Configure max count**

Sets the maximum number of traps that can be cached

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: max-count

Attribute Type: int16

Default Value: 200

Attribute Range: 1-500

**Netconf edit-config payload**

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <server-traps>
    <trap-cache>
      <config>
        <max-count>1</max-count> <!-- operation="delete"-->
      </config>
    </trap-cache>
  </server-traps>
</snmp>
```

**Command Syntax**

max-count <1-500>

---

**debug (snmp send|snmp receive|snmp process|snmp xdump|snmp error-string|snmp detail|snmp|snmp all)**

Attribute Name: debug

Attribute Type: bits (snmp send|snmp receive|snmp process|snmp xdump|snmp error-string|snmp detail|snmp|snmp all)

**Netconf RPC payload**

```
<snmp-agentx-enable-terminal-debugging xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
```

```
<debug>snmp send</debug>
</snmp-agentx-enable-terminal-debugging>
```

### Command Syntax

```
debug (snmp send|snmp receive|snmp process|snmp xdump|snmp error-string|snmp
detail|snmp|snmp all)
```

---

## no debug (snmp send|snmp receive|snmp process|snmp xdump|snmp error-string|snmp detail|snmp|snmp all)

Attribute Name: debug

Attribute Type: bits (snmp send|snmp receive|snmp process|snmp xdump|snmp error-string|snmp detail|snmp|snmp all)

### Netconf RPC payload

```
<snmp-agentx-disable-terminal-debugging xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-snm">
  <debug>snmp send</debug>
</snmp-agentx-disable-terminal-debugging>
```

### Command Syntax

```
no debug (snmp send|snmp receive|snmp process|snmp xdump|snmp error-string|snmp
detail|snmp|snmp all)
```

---

## IPI-SNMP-SERVER

---

### Configure vrf name

VRF name associated with this instance.

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: enabled

Attribute Type: empty

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snm">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snm-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
        </enabled>
      </config>
    </server>
  </servers>
</snmp>
```

## Command Syntax

```
snmp-server enable snmp (vrf (NAME|management) |)
```

---

## Configure system contact

Use this attribute to set the system contact information for the device (sysContact object)

Attribute Name: system-contact

Attribute Type: string

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
<server>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
</server>
</servers>
</snmp>
```

## Command Syntax

```
snmp-server contact (vrf (NAME|management) |) LINE
```

---

## Configure system location

Use this attribute to set the physical location information of the device (sysLocation object)

Attribute Name: system-location

Attribute Type: string

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
<server>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
</server>
</servers>
</snmp>
```

```

</server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server location (vrf (NAME|management) |) LINE
```

---

## Configure tcp session enabled

Use this attribute to start the SNMP agent daemon over TCP

Attribute Name: tcp-session-enabled

Attribute Type: empty

### Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
<server>
  <vrf-name>NAME</vrf-name>
  <config>
    <vrf-name>NAME</vrf-name>
  </config>
  <global>
    <config>
      </tcp-session-enabled><!-- operation="delete"-->
    </config>
  </global>
</server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server tcp-session (vrf (NAME|management) |)
```

---

## Configure disable default instance

Use this attribute to prevent default snmp instance from being enabled at start up

Attribute Name: disable-default-instance

Attribute Type: empty

### Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
<default-instance>
<config>
  </disable-default-instance><!-- operation="delete"-->
</config>
</default-instance>
</servers>

```

```
</snmp>
```

### Command Syntax

```
snmp-server disable-default
```

---

## Configure ent ipi iftable

Use this attribute to enable separate logical/physical interface tables

Attribute Name: ent-ipi-iftable

Attribute Type: empty

### Netconf edit-config payload

```
<custom xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <config>
    </ent-ipi-iftable><!-- operation="delete"-->
  </config>
</custom>
```

### Command Syntax

```
snmp ent-ipi-iftable
```

---

## IPI-SNMP-SERVER-EXTENDED

---

### Configure include directive

Use this attribute to create and include extension directory for snmp-dir

Attribute Name: include-directive

Attribute Type: empty

### Netconf edit-config payload

```
<snmp-dir xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
  <config>
    </include-directive><!-- operation="delete"-->
  </config>
</snmp-dir>
```

### Command Syntax

```
snmp-server include-directive
```

---

## Configure enable

Use this attribute to enable/disable SNMP server debugging

Attribute Name: enable

Attribute Type: empty

**Netconf edit-config payload**

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <debug xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</servers>
</snmp>

```

**Command Syntax**

```
debug snmp-server
```

---

**Configure filter type**

Use this attribute to update oid tree filter type for a view entry.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: filter-type

Attribute Type: enum (included|excluded)

**Netconf edit-config payload**

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <snmp-views xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <snmp-view>
        <view-name>VIEW-NAME</view-name>
        <config>
          <view-name>VIEW-NAME</view-name>
        </config>
        <oid-trees>
          <oid-tree>
            <oid>OID-TREE</oid>
            <config>
              <oid>OID-TREE</oid>
            </config>
            <filter-type>included</filter-type> <!-- operation="delete"-->
          </oid-tree>
        </oid-trees>
      </snmp-view>
    </snmp-views>
  </server>
</servers>

```



---

```
</snmp>
```

## Command Syntax

```
snmp-server view VIEW-NAME OID-TREE (included|excluded) (vrf (NAME|management) |)
```

---

## Configure engine id

Use this attribute to configure SNMPv3 engine ID.

This command is supported when following feature are enabled snmp version v3

Attribute Name: engine-id

Attribute Type: string

Attribute Range: 1-24

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <engine-id xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
    <config>
      <engine-id>ENGINE_ID_STR</engine-id> <!-- operation="delete"-->
    </config>
  </engine-id>
</snmp>
```

## Command Syntax

```
snmp-server engineID ENGINE_ID_STR
```

---

## Configure smux port enable

Use this attribute to enable smux-port.

Attribute Name: smux-port-enable

Attribute Type: empty

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <smux-port xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <config>
          </smux-port-enable><!-- operation="delete"-->
        </config>
      </smux-port>
    </server>
  </servers>
```

---

```
</snmp>
```

## Command Syntax

```
snmp-server smux-port-enable (vrf (NAME|management) |)
```

---

## Configure host name

Use this attribute to configure an SNMP trap host. An SNMP trap host is usually a network management station (NMS) or an SNMP manager.

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

Attribute Name: notification-type

Attribute Type: enum (traps|informs)

Attribute Name: snmp-version

Attribute Type: enum (1|2c|3)

Attribute Name: community

Attribute Type: string

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <host>
          <host-name>A.B.C.D</host-name>
          <config>
            <host-name>A.B.C.D</host-name>
            <notification-type>traps</notification-type>
            <snmp-version>1</snmp-version>
            <community>WORD</community>
            <udp-port>1</udp-port>
          </config>
        </host>
      </hosts>
    </server>
  </servers>
</snmp>
```

## Command Syntax

```
snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) (traps) version (1|2c) WORD (udp-port
<1-65535>|) (vrf (NAME|management)|)
```

## Configure notification type

Use this attribute to configure an SNMP trap host. An SNMP trap host is usually a network management station (NMS) or an SNMP manager.

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

Attribute Name: notification-type

Attribute Type: enum (traps|informs)

Attribute Name: snmp-version

Attribute Type: enum (1|2c|3)

Attribute Name: snmpv3-auth-type

Attribute Type: enum (noauth|auth|priv)

Attribute Name: snmpv3-user

Attribute Type: string

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <host>
        <host-name>A.B.C.D</host-name>
        <config>
          <host-name>A.B.C.D</host-name>
          <notification-type>traps</notification-type>
          <snmp-version>1</snmp-version>
          <snmpv3-auth-type>noauth</snmpv3-auth-type>
          <snmpv3-user>WORD</snmpv3-user>
          <udp-port>1</udp-port>
        </config>
      </host>
    </hosts>
  </server>
</servers>
```

```

</server>
</servers>
</snmp>

```

## Command Syntax

```

snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) (traps) version (3) (noauth|auth|priv)
WORD (udp-port <1-65535>|) (vrf (NAME|management)|)

```

---

## Configure snmp version

Use this attribute to configure an SNMP trap host. An SNMP trap host is usually a network management station (NMS) or an SNMP manager.

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

Attribute Name: notification-type

Attribute Type: enum (traps|informs)

Attribute Name: snmp-version

Attribute Type: enum (1|2c|3)

Attribute Name: community

Attribute Type: string

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snm">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snm-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snm-server-extended">
        <host>
          <host-name>A.B.C.D</host-name>
          <config>
            <host-name>A.B.C.D</host-name>
            <notification-type>traps</notification-type>
            <snmp-version>1</snmp-version>
            <community>WORD</community>
            <udp-port>1</udp-port>
          </config>
        </host>
      </hosts>
    </server>
  </servers>
</snmp>

```

```

</server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) (informs) version (2c) WORD (udp-port
<1-65535>|) (vrf (NAME|management)|)
```

## Configure snmpv3 auth type

Use this attribute to configure an SNMP trap host. An SNMP trap host is usually a network management station (NMS) or an SNMP manager.

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

Attribute Name: notification-type

Attribute Type: enum (traps|informs)

Attribute Name: snmp-version

Attribute Type: enum (1|2c|3)

Attribute Name: snmpv3-auth-type

Attribute Type: enum (noauth|auth|priv)

Attribute Name: snmpv3-user

Attribute Type: string

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <host>
        <host-name>A.B.C.D</host-name>
        <config>
          <host-name>A.B.C.D</host-name>
          <notification-type>traps</notification-type>
          <snmp-version>1</snmp-version>
          <snmpv3-auth-type>noauth</snmpv3-auth-type>
          <snmpv3-user>WORD</snmpv3-user>
          <udp-port>1</udp-port>

```

```

        </config>
    </host>
</hosts>
</server>
</servers>
</snmp>

```

## Command Syntax

```

snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) (informs) version (3)
(noauth|auth|priv) WORD (udp-port <1-65535>|) (vrf (NAME|management)|)

```

## Configure community

Use this attribute to configure an SNMP trap host. An SNMP trap host is usually a network management station (NMS) or an SNMP manager.

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

Attribute Name: snmp-version

Attribute Type: enum (1|2c|3)

Attribute Name: community

Attribute Type: string

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
    <host>
      <host-name>A.B.C.D</host-name>
      <config>
        <host-name>A.B.C.D</host-name>
        <snmp-version>1</snmp-version>
        <community>WORD</community>
        <udp-port>1</udp-port>
      </config>
    </host>
  </hosts>
</server>

```

```
</servers>
</snmp>
```

## Command Syntax

```
snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) version (1|2c) WORD (udp-port <1-65535>|) (vrf (NAME|management)|)
```

---

## Configure snmpv3 user

Use this attribute to configure an SNMP trap host. An SNMP trap host is usually a network management station (NMS) or an SNMP manager.

Attribute Name: host-name

Attribute Type: string

Attribute Range: 1-63

Attribute Name: snmp-version

Attribute Type: enum (1|2c|3)

Attribute Name: snmpv3-auth-type

Attribute Type: enum (noauth|auth|priv)

Attribute Name: snmpv3-user

Attribute Type: string

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <host>
        <host-name>A.B.C.D</host-name>
        <config>
          <host-name>A.B.C.D</host-name>
          <snmp-version>1</snmp-version>
          <snmpv3-auth-type>noauth</snmpv3-auth-type>
          <snmpv3-user>WORD</snmpv3-user>
          <udp-port>1</udp-port>
        </config>
      </host>
    </hosts>
  </server>
```

```
</servers>
</snmp>
```

## Command Syntax

```
snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) version (3) (noauth|auth|priv) WORD
(udp-port <1-65535>|) (vrf (NAME|management)|)
```

---

## Configure udp port

Use this attribute to specify the port to be used when SNMP sends packets to host. The default is 162.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: udp-port

Attribute Type: uint32

Attribute Range: 1-65535

Attribute Name: host-user

Attribute Type: string

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <hosts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <host>
        <host-name>A.B.C.D</host-name>
        <config>
          <host-name>A.B.C.D</host-name>
          <host-user>WORD</host-user> <!-- operation="delete"-->
        </config>
        <udp-port>1</udp-port> <!-- operation="delete"-->
      </host>
    </hosts>
  </server>
</servers>
</snmp>
```

## Command Syntax

```
snmp-server host (A.B.C.D|X:X::X:X|HOSTNAME) WORD (udp-port <1-65535>|) (vrf
(NAME|management)|)
```

---

## Configure user name

Use this attribute to create an SNMP server user.

Attribute Name: user-name



Attribute Type: string

Attribute Range: 5-32

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

### Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <user> <!-- operation="delete"-->
          <user-name>WORD</user-name>
          <config>
            <user-name>WORD</user-name>
            <authentication-type>md5</authentication-type>
            <encryption-type>1</encryption-type>
            <authentication-password>AUTH-PASSWORD</authentication-password>
          </config>
        </user>
      </users>
    </server>
  </servers>
</snmp>

```

### Command Syntax

```
snmp-server user WORD auth (md5|sha) encrypt AUTH-PASSWORD (vrf (NAME|management)|)
```

## Configure authentication type

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <user> <!-- operation="delete"-->
          <user-name>WORD</user-name>
          <config>
            <user-name>WORD</user-name>
            <authentication-type>md5</authentication-type>
            <encryption-type>0</encryption-type>
            <authentication-password>AUTH-PASSWORD</authentication-password>
          </config>
        </user>
      </users>
    </server>
  </servers>
</snmp>
```

### Command Syntax

```
snmp-server user WORD auth (md5|sha) AUTH-PASSWORD (vrf (NAME|management)|)
```

## Configure user type

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: user-type

Attribute Type: union

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

**Netconf edit-config payload**

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
    <user> <!-- operation="delete"-->
      <user-name>WORD</user-name>
      <config>
        <user-name>WORD</user-name>
        <user-type>network-operator</user-type>
        <authentication-type>md5</authentication-type>
        <encryption-type>1</encryption-type>
        <authentication-password>AUTH-PASSWORD</authentication-password>
      </config>
    </user>
  </users>
</server>
</servers>
</snmp>

```

**Command Syntax**

```

snmp-server user WORD (network-operator|network-admin|WORD) auth (md5|sha) encrypt
AUTH-PASSWORD (vrf (NAME|management) |)

```

**Configure encryption type**

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: user-type

Attribute Type: union

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

**Netconf edit-config payload**

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">

```

```

<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <user> <!-- operation="delete"-->
        <user-name>WORD</user-name>
        <config>
          <user-name>WORD</user-name>
          <user-type>network-operator</user-type>
          <authentication-type>md5</authentication-type>
          <encryption-type>0</encryption-type>
          <authentication-password>AUTH-PASSWORD</authentication-password>
        </config>
      </user>
    </users>
  </server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server user WORD (network-operator|network-admin|WORD) auth (md5|sha) AUTH-
PASSWORD (vrf (NAME|management) |)
```

## Configure authentication password

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

Attribute Name: privilege-type

Attribute Type: enum (des|aes)

Attribute Name: privilege-password

Attribute Type: string

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
```

```

<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
  <server>
    <vrf-name>NAME</vrf-name>
    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <user> <!-- operation="delete"-->
        <user-name>WORD</user-name>
        <config>
          <user-name>WORD</user-name>
          <authentication-type>md5</authentication-type>
          <encryption-type>1</encryption-type>
          <authentication-password>AUTH-PASSWORD</authentication-password>
          <privilege-type>des</privilege-type>
          <privilege-password>PRIV-PASSWORD</privilege-password>
        </config>
      </user>
    </users>
  </server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server user WORD auth (md5|sha) encrypt AUTH-PASSWORD priv (des|aes) PRIV-
PASSWORD (vrf (NAME|management) |)
```

## Configure privilege type

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

Attribute Name: privilege-type

Attribute Type: enum (des|aes)

Attribute Name: privilege-password

Attribute Type: string

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <user> <!-- operation="delete"-->
          <user-name>WORD</user-name>
          <config>
            <user-name>WORD</user-name>
            <authentication-type>md5</authentication-type>
            <encryption-type>0</encryption-type>
            <authentication-password>AUTH-PASSWORD</authentication-password>
            <privilege-type>des</privilege-type>
            <privilege-password>PRIV-PASSWORD</privilege-password>
          </config>
        </user>
      </users>
    </server>
  </servers>
</snmp>

```

## Command Syntax

```

snmp-server user WORD auth (md5|sha) AUTH-PASSWORD priv (des|aes) PRIV-PASSWORD
(vrf (NAME|management) |)

```

## Configure privilege password

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: user-type

Attribute Type: union

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

Attribute Name: privilege-type

Attribute Type: enum (des|aes)

Attribute Name: privilege-password

Attribute Type: string

### Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <user> <!-- operation="delete"-->
          <user-name>WORD</user-name>
          <config>
            <user-name>WORD</user-name>
            <user-type>network-operator</user-type>
            <authentication-type>md5</authentication-type>
            <encryption-type>1</encryption-type>
            <authentication-password>AUTH-PASSWORD</authentication-password>
            <privilege-type>des</privilege-type>
            <privilege-password>PRIV-PASSWORD</privilege-password>
          </config>
        </user>
      </users>
    </server>
  </servers>
</snmp>
```

### Command Syntax

```
snmp-server user WORD (network-operator|network-admin|WORD) auth (md5|sha) encrypt
AUTH-PASSWORD priv (des|aes) PRIV-PASSWORD (vrf (NAME|management) |)
```

## Configure vrf name

Use this attribute to create an SNMP server user.

Attribute Name: user-name

Attribute Type: string

Attribute Range: 5-32

Attribute Name: user-type

Attribute Type: union

Attribute Name: authentication-type

Attribute Type: enum (md5|sha)

Attribute Name: encryption-type

Attribute Type: enum (plain|encrypt)

Attribute Name: authentication-password

Attribute Type: string

Attribute Name: privilege-type

Attribute Type: enum (des|aes)

Attribute Name: privilege-password

Attribute Type: string

### Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <users xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <user> <!-- operation="delete"-->
          <user-name>WORD</user-name>
          <config>
            <user-name>WORD</user-name>
            <user-type>network-operator</user-type>
            <authentication-type>md5</authentication-type>
            <encryption-type>0</encryption-type>
            <authentication-password>AUTH-PASSWORD</authentication-password>
            <privilege-type>des</privilege-type>
            <privilege-password>PRIV-PASSWORD</privilege-password>
          </config>
        </user>
      </users>
    </server>
  </servers>
</snmp>

```

### Command Syntax

```

snmp-server user WORD (network-operator|network-admin|WORD) auth (md5|sha) AUTH-
  PASSWORD priv (des|aes) PRIV-PASSWORD (vrf (NAME|management) |)

```

## Configure context name

Use this attribute to create an SNMP server context

Attribute Name: context-name

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>

```



```

    <vrf-name>NAME</vrf-name>
    <config>
        <vrf-name>NAME</vrf-name>
    </config>
    <contexts xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <context>
            <context-name>WORD</context-name>
            <config>
                <context-name>WORD</context-name>
            </config>
        </context>
    </contexts>
</server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server context WORD (vrf (NAME|management) |)
```

## Configure acl name

Use this attribute to create an SNMP community string and user-acl.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: acl-name

Attribute Type: string

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
<servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
        <vrf-name>NAME</vrf-name>
        <config>
            <vrf-name>NAME</vrf-name>
        </config>
        <communities xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
            <community>
                <community-name>WORD</community-name>
                <config>
                    <community-name>WORD</community-name>
                    </config>
                    <acl-name>WORD</acl-name> <!-- operation="delete"-->
                </community>
            </communities>
        </server>
    </servers>
</snmp>

```

## Command Syntax

```
snmp-server community WORD use-acl WORD (vrf (NAME|management) |)
```

---

## Configure community name

Use this attribute to create an SNMP community string and access privileges.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: community-name

Attribute Type: string

Attribute Range: 1-32

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <communities xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <community>
          <community-name>WORD</community-name>
          <config>
            <community-name>WORD</community-name>
          </config>
        </community>
      </communities>
    </server>
  </servers>
</snmp>
```

## Command Syntax

```
snmp-server community WORD (vrf (NAME|management) |)
```

---

## Configure snmp group

Use this attribute to create an SNMP community string with group.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: snmp-group

Attribute Type: enum (network-operator|network-admin)

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
```

```

    <config>
      <vrf-name>NAME</vrf-name>
    </config>
    <communities xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
      <community>
        <community-name>WORD</community-name>
        <config>
          <community-name>WORD</community-name>
        </config>
        <snmp-group>network-operator</snmp-group> <!-- operation="delete"-->
      </community>
    </communities>
  </server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server community WORD group (network-operator|network-admin) (vrf
(NAME|management) |)
```

## Configure access privileges

Use this attribute to create an SNMP community string and access privileges.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: access-privileges

Attribute Type: enum (ro)

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <communities xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <community>
          <community-name>WORD</community-name>
          <config>
            <community-name>WORD</community-name>
          </config>
          <access-privileges>ro</access-privileges> <!-- operation="delete"-->
        </community>
      </communities>
    </server>
  </servers>
</snmp>

```

## Command Syntax

```
snmp-server community WORD (ro) (vrf (NAME|management) |)
```

---

## Configure access

Use this attribute to set access privileges to this community view.

This command is supported when following feature are enabled SNMP-AGENT feature

Attribute Name: access

Attribute Type: enum (ro)

Attribute Name: community-view-name

Attribute Type: string

Attribute Name: version

Attribute Type: enum (v1|v2c)

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <communities xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-
extended">
        <community>
          <community-name>WORD</community-name>
          <config>
            <community-name>WORD</community-name>
            <community-view-name>VIEW-NAME</community-view-name> <!--
operation="delete"-->
            <version>v1</version> <!-- operation="delete"-->
          </config>
          <access>ro</access> <!-- operation="delete"-->
        </community>
      </communities>
    </server>
  </servers>
</snmp>
```

## Command Syntax

```
snmp-server community WORD view VIEW-NAME version (v1|v2c) (ro) (vrf
(NAME|management) |)
```

---

## Configure community context

Use this attribute to create an SNMP community string and access privileges.

Attribute Name: community-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: community-context

Attribute Type: string

Attribute Range: 1-32

Attribute Name: community-user

Attribute Type: string

### Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <communities xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <community>
          <community-name>WORD</community-name>
          <config>
            <community-name>WORD</community-name>
          </config>
          <community-context-mapping>
            <config>
              <community-context>WORD</community-context>
              <community-user>WORD</community-user>
            </config>
          </community-context-mapping>
        </community>
      </communities>
    </server>
  </servers>
</snmp>

```

### Command Syntax

```
snmp-server community-map WORD context WORD user WORD (vrf (NAME|management)|)
```

## Configure group name

Use this attribute to create an SNMP group string.

Attribute Name: group-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-version

Attribute Type: enum (1|2c|3)

**Netconf edit-config payload**

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <server-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <server-group>
          <group-name>WORD</group-name>
          <config>
            <group-name>WORD</group-name>
            <group-version>1</group-version>
          </config>
        </server-group>
      </server-groups>
    </server>
  </servers>
</snmp>

```

**Command Syntax**

```
snmp-server group WORD version (1|2c) (vrf (NAME|management) |)
```

**Configure group version**

Use this attribute to create an SNMP group string.

Attribute Name: group-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-version

Attribute Type: enum (1|2c|3)

Attribute Name: snmpv3-group-auth-type

Attribute Type: enum (auth|priv|noauth)

**Netconf edit-config payload**

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <server-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <server-group>

```

```

    <group-name>WORD</group-name>
    <config>
      <group-name>WORD</group-name>
      <group-version>1</group-version>
      <snmpv3-group-auth-type>auth</snmpv3-group-auth-type>
    </config>
  </server-group>
</server-groups>
</server>
</servers>
</snmp>

```

## Command Syntax

```
snmp-server group WORD version (3) (auth|priv|noauth) (vrf (NAME|management)|)
```

## Configure context

Use this attribute to create an SNMP group string.

Attribute Name: group-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-version

Attribute Type: enum (1|2c|3)

Attribute Name: context

Attribute Type: union

Attribute Range: 1-32

## Netconf edit-config payload

```

<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <server-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <server-group>
          <group-name>WORD</group-name>
          <config>
            <group-name>WORD</group-name>
            <group-version>1</group-version>
            <context>1</context>
          </config>
        </server-group>
      </server-groups>
    </server>
  </servers>
</snmp>

```

```
</servers>
</snmp>
```

## Command Syntax

```
snmp-server group WORD version (1|2c) context (all|WORD) (vrf (NAME|management)|)
```

## Configure snmpv3 group auth type

Use this attribute to create an SNMP group string.

Attribute Name: group-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: group-version

Attribute Type: enum (1|2c|3)

Attribute Name: snmpv3-group-auth-type

Attribute Type: enum (auth|priv|noauth)

Attribute Name: context

Attribute Type: enum (all)

Attribute Range: 1-32

## Netconf edit-config payload

```
<snmp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp">
  <servers xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server">
    <server>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>NAME</vrf-name>
      </config>
      <server-groups xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-snmp-server-extended">
        <server-group>
          <group-name>WORD</group-name>
          <config>
            <group-name>WORD</group-name>
            <group-version>1</group-version>
            <snmpv3-group-auth-type>auth</snmpv3-group-auth-type>
            <context>1</context>
          </config>
        </server-group>
      </server-groups>
    </server>
  </servers>
</snmp>
```



---

## Command Syntax

```
snmp-server group WORD version (3) (auth|priv|noauth) context <1-32> (all) (vrf  
(NAME|management) |)
```

---

## debug snmp-server

### Netconf RPC payload

```
<snmp-server-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
snmp-server-extended"/>
```

### Command Syntax

```
debug snmp-server
```

---

## no debug snmp-server

### Netconf RPC payload

```
<snmp-server-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
snmp-server-extended"/>
```

### Command Syntax

```
no debug snmp-server
```

---

## IPI-QOS

---

## Configure enable qos

Use this attribute to globally enable or disable QoS

Attribute Name: enable-qos

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">  
<global>  
<config>  
  <enable-qos>disable</enable-qos> <!-- operation="delete"-->  
</config>  
</global>  
</qos>
```

### Command Syntax

```
qos (disable|enable)
```

---

## Configure name

Use this attribute to set a name to CoS to Traffic-Class profile

This command is supported when following feature are enabled QoS Mapping Profile feature

Attribute Name: name

Attribute Type: string

Attribute Range: 1-31

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <map-profile>
      <cos-to-queue-profiles>
        <cos-to-queue-profile> <!-- operation="delete"-->
          <name>NAME</name>
          <config>
            <name>WORD</name>
          </config>
        </cos-to-queue-profile>
      </cos-to-queue-profiles>
    </map-profile>
  </global>
</qos>
```

### Command Syntax

```
qos profile cos-to-queue (NAME|default)
```

---

## Configure color

Use this attribute to select the color CoS DEI is mapped to.

This command is supported when following feature are enabled QoS Mapping Profile feature and following feature are disabled QoS custom options2

Attribute Name: color

Attribute Type: enum (green|yellow|red)

Attribute Name: queue-id

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <map-profile>
      <cos-to-queue-profiles>
        <cos-to-queue-profile>
          <name>NAME</name>
          <config>
            <name>WORD</name>
          </config>
        <cos-dei-to-queues>
```

```

<cos-dei-to-queue>
  <dei-value>all</dei-value>
  <config>
    <dei-value>all</dei-value>
    <cos-value>0</cos-value>
    <queue-id>0</queue-id> <!-- operation="delete"-->
  </config>
  <cos-value>0</cos-value>
  <color>green</color> <!-- operation="delete"-->
</cos-dei-to-queue>
</cos-dei-to-queues>
</cos-to-queue-profile>
</cos-to-queue-profiles>
</map-profile>
</global>
</qos>

```

## Command Syntax

```
cos <0-7> (dei (0|1|all)|) queue <0-7> (color (green|yellow|red)|)
```

---

## Configure dscp value

Use this attribute to select the color to map.

This command is supported when following feature are enabled QoS Mapping Profile feature

Attribute Name: color

Attribute Type: enum (green|yellow|red)

Attribute Name: queue-id

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <map-profile>
      <dscp-to-queue-profiles>
        <dscp-to-queue-profile>
          <name>NAME</name>
          <config>
            <name>WORD</name>
          </config>
        <dscp-to-queues>
          <dscp-to-queue>
            <dscp-value>0</dscp-value>
            <config>
              <dscp-value>0</dscp-value>
              <queue-id>0</queue-id> <!-- operation="delete"-->
            </config>
            <color>green</color> <!-- operation="delete"-->

```

```

</dscp-to-queue>
</dscp-to-queues>
</dscp-to-queue-profile>
</dscp-to-queue-profiles>
</map-profile>
</global>
</qos>

```

## Command Syntax

```
dscp <0-63> queue <0-7> color (green|yellow|red)
```

---

## Configure queue id

Use this attribute to select the Traffic-Class DSCP is mapped to

This command is supported when following feature are enabled QoS Mapping Profile feature

Attribute Name: queue-id

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<map-profile>
<dscp-to-queue-profiles>
<dscp-to-queue-profile>
  <name>NAME</name>
  <config>
    <name>WORD</name>
  </config>
<dscp-to-queues>
<dscp-to-queue>
  <dscp-value>0</dscp-value>
  <config>
    <dscp-value>0</dscp-value>
  </config>
  <queue-id>0</queue-id> <!-- operation="delete"-->
</dscp-to-queue>
</dscp-to-queues>
</dscp-to-queue-profile>
</dscp-to-queue-profiles>
</map-profile>
</global>
</qos>

```

## Command Syntax

```
dscp <0-63> queue <0-7>
```

---

## Configure cos value

Use this attribute to select the color to map. Default value is 3.

This command is supported when following feature are enabled QoS Mapping Profile feature

Attribute Name: color

Attribute Type: enum (green|yellow|red|all)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <map-profile>
      <queue-color-to-cos-profiles>
        <queue-color-to-cos-profile>
          <name>NAME</name>
          <config>
            <name>WORD</name>
          </config>
        <queue-color-to-coses>
          <queue-color-to-cos> <!-- operation="delete"-->
            <color>all</color>
            <config>
              <color>all</color>
              <queue-id>0</queue-id>
              <cos-value>0</cos-value>
            </config>
            <queue-id>0</queue-id>
          </queue-color-to-cos>
        </queue-color-to-coses>
      </queue-color-to-cos-profile>
    </queue-color-to-cos-profiles>
  </map-profile>
</global>
</qos>
```

### Command Syntax

```
queue <0-7> (color (green|yellow|red|all) |) cos <0-7>
```

---

## Configure precedence value

Use this attribute to select the Traffic-Class to map

This command is supported when following feature are enabled QoS Mapping Profile feature

Attribute Name: queue-id

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: precedence-value

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <map-profile>
      <queue-to-precedence-profiles>
        <queue-to-precedence-profile>
          <name>NAME</name>
          <config>
            <name>WORD</name>
          </config>
        <queue-to-precedences>
          <queue-to-precedence> <!-- operation="delete"-->
            <queue-id>0</queue-id>
            <config>
              <queue-id>0</queue-id>
              <precedence-value>0</precedence-value>
            </config>
          </queue-to-precedence>
        </queue-to-precedences>
      </queue-to-precedence-profile>
    </queue-to-precedence-profiles>
  </map-profile>
</global>
</qos>
```

### Command Syntax

```
queue <0-7> precedence <0-7>
```

---

## Configure cos

Use this command to enable remarking of CoS set by the egress map

Attribute Name: cos

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <remark>
      <config>
        </cos><!-- operation="delete"-->
      </config>
    </remark>
  </global>
```

```
</qos>
```

## Command Syntax

```
qos remark cos
```

---

## Configure dei

Use this command to enable remarking of DEI set by the egress map

Attribute Name: dei

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <remark>
      <config>
        </dei><!-- operation="delete"-->
      </config>
    </remark>
  </global>
</qos>
```

## Command Syntax

```
qos remark dei
```

---

## Configure dscp

Use this command to enable remarking of DSCP set by the egress map

Attribute Name: dscp

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <remark>
      <config>
        </dscp><!-- operation="delete"-->
      </config>
    </remark>
  </global>
</qos>
```

## Command Syntax

```
qos remark dscp
```

---

## Configure type

Use this attribute to set the class-map name

Attribute Name: name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: type

Attribute Type: enum (qos|queuing|queuing-default|vlan-queuing)

Attribute Name: match-criteria

Attribute Type: enum (match-all|match-any)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map> <!-- operation="delete"-->
        <name>NAME</name>
        <config>
          <name>NAME</name>
          <type>1</type>
          <match-criteria>1</match-criteria>
        </config>
      </class-map>
    </class-maps>
  </global>
</qos>
```

### Command Syntax

```
class-map NAME
```

---

## Configure match criteria

Use this attribute to set the class-map name

Attribute Name: name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: type

Attribute Type: enum (qos|queuing|queuing-default|vlan-queuing)

Attribute Name: match-criteria

Attribute Type: enum (match-all|match-any)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
```



```

<class-maps>
<class-map> <!-- operation="delete"-->
  <name>NAME</name>
  <config>
    <name>NAME</name>
    <type>qos</type>
    <match-criteria>1</match-criteria>
  </config>
</class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
class-map type (qos) NAME
```

---

## Configure reference description

This attribute configures reference description message on class-map profile for QoS type.

Attribute Name: reference-description

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<class-maps>
<class-map>
  <name>NAME</name>
  <config>
    <name>NAME</name>
    </config>
    <reference-description>LINE</reference-description> <!-- operation="delete"-->
  </class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
reference-description LINE
```

---

## Configure access control list name

Use this attribute to classify traffic based on the Access Control List (ACL)

Attribute Name: access-control-list-name

Attribute Type: string

Attribute Range: 1-64

**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <access-control-list-name>NAME</access-control-list-name> <!--
operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>

```

**Command Syntax**

```
match access-group NAME
```

---

**Configure ethertype**

Use this attribute to classify traffic based on the EtherType value(s)

Attribute Name: ethertype

Attribute Type: string

**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <ethertype>WORD</ethertype> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>

```

---

## Command Syntax

```
match ethertype WORD
```

---

## Configure traffic type

Use this attribute to classify traffic based on the traffic type value

Attribute Name: traffic-type

Attribute Type: enum (l2-uc|l2-uc-unknown|default)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <traffic-type>l2-uc</traffic-type> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

## Command Syntax

```
match traffic-type (l2-uc|l2-uc-unknown|default)
```

---

## Configure inner cos

Use this attribute to classify traffic based on inner Class of Service (CoS) value

Attribute Name: inner-cos

Attribute Type: string

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      </class-map>
    </class-maps>
  </global>
</qos>
```

```

<match-any-conditions>
<config>
    <inner-cos>WORD</inner-cos> <!-- operation="delete"-->
</config>
</match-any-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
match cos inner WORD
```

---

## Configure vlan

Use this attribute to classify traffic based on VLAN ID. Enter VLAN ID 1-4094 or range of VLAN ID's.

Attribute Name: vlan

Attribute Type: string

Attribute Range: 1-4094

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<class-maps>
<class-map>
    <name>NAME</name>
    <config>
        <name>NAME</name>
    </config>
<match-any-conditions>
<config>
    <vlan>WORD</vlan> <!-- operation="delete"-->
</config>
</match-any-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
match vlan WORD
```

---

## Configure inner vlan

Use this attribute to classify traffic based on inner VLAN ID. Enter VLAN ID 1-4094 or range of VLAN ID's.

Attribute Name: inner-vlan

Attribute Type: string

Attribute Range: 1-4094

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <inner-vlan>WORD</inner-vlan> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

### Command Syntax

```
match vlan inner WORD
```

---

## Configure rtp

Use this attribute to classify traffic based on the Real-time Transport Protocol (RTP). The rtp value 2000-65535 or range of rtp values.

Attribute Name: rtp

Attribute Type: string

Attribute Range: 2000-65535

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <rtp>WORD</rtp> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
```

---

```
</qos>
```

## Command Syntax

```
match ip rtp WORD
```

---

## Configure precedence

Use this attribute to classify traffic based on the precedence value. Warning: In CLI show running, precedence values with well-known names (ex.: priority, immediate) will be displayed as such. On Netconf, precedence values will always be numeric.

Attribute Name: precedence

Attribute Type: string

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <precedence>WORD</precedence> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

## Command Syntax

```
match precedence WORD
```

---

## Configure packet protocol

Use this attribute to classify traffic based on the protocol

Attribute Name: packet-protocol

Attribute Type: enum (arp|bridging|cdp|clns|clns-es|clns-is|dhcp|isis|ldp|netbios)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
```

```

    <config>
      <name>NAME</name>
    </config>
  <match-any-conditions>
    <config>
      <packet-protocol>arp</packet-protocol> <!-- operation="delete"-->
    </config>
  </match-any-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

## Command Syntax

```
match protocol (arp|bridging|cdp|clns|clns-es|clns-is|dhcp|isis|ldp|netbios)
```

## Configure source mac

Use this attribute to classify traffic based on the source MAC address. The MAC address value allow up to 17 characters.

Attribute Name: source-mac

Attribute Type: string

Attribute Range: 1-17

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <source-mac>MAC_ADDR</source-mac> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>

```

## Command Syntax

```
match mac src MAC_ADDR
```

---

## Configure destination mac

Use this attribute to classify traffic based on the destination MAC address. The MAC address value allow up to 17 characters.

Attribute Name: destination-mac

Attribute Type: string

Attribute Range: 1-17

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-any-conditions>
        <config>
          <destination-mac>MAC_ADDR</destination-mac> <!-- operation="delete"-->
        </config>
      </match-any-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

### Command Syntax

```
match mac dest MAC_ADDR
```

---

## Configure port type

Use this attribute to classify traffic based on layer 4 source port or destination port

Attribute Name: port-type

Attribute Type: enum (source-port|destination-port)

Attribute Name: port

Attribute Type: string

Attribute Range: 1-65535

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
```



```

    </config>
  <match-any-conditions>
  <ipv4>
  <layer4-match> <!-- operation="delete"-->
    <port-type>source-port</port-type>
    <config>
      <port-type>source-port</port-type>
      <protocol>any</protocol>
      <port>WORD</port>
    </config>
    <protocol>any</protocol>
  </layer4-match>
</ipv4>
</match-any-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

## Command Syntax

```
match layer4 (any|tcp|udp) (source-port|destination-port) WORD
```

---

## Configure ethertype all

Use this attribute to classify traffic based on the EtherType value

Attribute Name: ethertype-all

Attribute Type: string

Attribute Range: 5-6

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
  <class-maps>
  <class-map>
    <name>NAME</name>
    <config>
      <name>NAME</name>
    </config>
  <match-all-conditions>
  <config>
    <ethertype-all>WORD</ethertype-all> <!-- operation="delete"-->
  </config>
</match-all-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

---

## Command Syntax

```
match ethertype WORD
```

---

## Configure traffic type all

Use this attribute to classify traffic based on the traffic type

Attribute Name: traffic-type-all

Attribute Type: enum (l2-uc|l2-uc-unknown|default)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <traffic-type-all>l2-uc</traffic-type-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

## Command Syntax

```
match traffic-type (l2-uc|l2-uc-unknown|default)
```

---

## Configure cos all

Use this attribute to classify traffic based on the Class of Service (CoS) value

Attribute Name: cos-all

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      </class-map>
    </class-maps>
  </global>
</qos>
```

```

<match-all-conditions>
<config>
    <cos-all>0</cos-all> <!-- operation="delete"-->
</config>
</match-all-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
match cos <0-7>
```

---

## Configure inner cos all

Use this attribute to classify traffic based on the inner Class of Service (CoS) value

Attribute Name: inner-cos-all

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<class-maps>
<class-map>
    <name>NAME</name>
    <config>
        <name>NAME</name>
    </config>
<match-all-conditions>
<config>
    <inner-cos-all>0</inner-cos-all> <!-- operation="delete"-->
</config>
</match-all-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
match cos inner <0-7>
```

---

## Configure vlan all

Use this attribute to classify traffic based on the VLAN ID

Attribute Name: vlan-all

Attribute Type: uint16

Attribute Range: 1-4094

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <vlan-all>1</vlan-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

### Command Syntax

```
match vlan <1-4094>
```

---

## Configure inner vlan all

Use this attribute to classify traffic based on the inner VLAN ID

Attribute Name: inner-vlan-all

Attribute Type: uint16

Attribute Range: 1-4094

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <inner-vlan-all>1</inner-vlan-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

---

## Command Syntax

```
match vlan inner <1-4094>
```

---

## Configure rtp all

Use this attribute to classify traffic based on the Real-time Transport Protocol (RTP)

Attribute Name: rtp-all

Attribute Type: uint32

Attribute Range: 2000-65535

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <rtp-all>2000</rtp-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

## Command Syntax

```
match ip rtp <2000-65535>
```

---

## Configure dscp all

Use this attribute to classify traffic based on the Differentiated Services Control Protocol (DSCP) value. The DSCP value range is 0-63. Warning: In CLI show running, DSCP values with well-known names (ex.: af11, cs0) will be displayed as such. On Netconf, DSCP values will always be numeric. The string type allow up to 8 characters on well-known name.

Attribute Name: dscp-all

Attribute Type: string

Attribute Range: 1-8

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
```

```

    <name>NAME</name>
  <config>
    <name>NAME</name>
  </config>
<match-all-conditions>
<config>
  <dscp-all>WORD</dscp-all> <!-- operation="delete"-->
</config>
</match-all-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

### Command Syntax

```
match dscp WORD
```

---

## Configure precedence all

Use this attribute to classify traffic based on the precedence value. The precedence value range is 0-7. Warning: In CLI show running, precedence values with well-known names (ex.: priority, immediate) will be displayed as such. On Netconf, precedence values will always be numeric. The string type allow up to 13 characters on well-known name.

Attribute Name: precedence-all

Attribute Type: string

Attribute Range: 1-13

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
    <class-map>
      <name>NAME</name>
      <config>
        <name>NAME</name>
      </config>
    <match-all-conditions>
    <config>
      <precedence-all>WORD</precedence-all> <!-- operation="delete"-->
    </config>
    </match-all-conditions>
    </class-map>
    </class-maps>
  </global>
</qos>

```

### Command Syntax

```
match precedence WORD
```

---

## Configure packet protocol all

Use this attribute to classify traffic based on the protocol

Attribute Name: packet-protocol-all

Attribute Type: enum (arp|bridging|cdp|clns|clns-es|clns-is|dhcp|isis|ldp|netbios)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <packet-protocol-all>arp</packet-protocol-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

### Command Syntax

```
match protocol (arp|bridging|cdp|clns|clns-es|clns-is|dhcp|isis|ldp|netbios)
```

---

## Configure source mac all

Use this attribute to classify traffic based on the source MAC address. The MAC address value allow up to 17 characters.

Attribute Name: source-mac-all

Attribute Type: string

Attribute Range: 1-17

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <source-mac-all>MAC_ADDR</source-mac-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>
```

```

</config>
</match-all-conditions>
</class-map>
</class-maps>
</global>
</qos>

```

## Command Syntax

```
match mac src MAC_ADDR
```

---

## Configure destination mac all

Use this attribute to classify traffic based on the destination MAC address. The MAC address value allow up to 17 characters.

Attribute Name: destination-mac-all

Attribute Type: string

Attribute Range: 1-17

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <config>
          <destination-mac-all>MAC_ADDR</destination-mac-all> <!-- operation="delete"-->
        </config>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>

```

## Command Syntax

```
match mac dest MAC_ADDR
```

---

## Configure port all

Use this attribute to classify traffic based on the port

Attribute Name: port-all

Attribute Type: uint16

Attribute Range: 1-65535



**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps>
      <class-map>
        <name>NAME</name>
        <config>
          <name>NAME</name>
        </config>
      <match-all-conditions>
        <layer4-matches-ipv4>
          <layer4-match-ipv4> <!-- operation="delete"-->
            <port-all>1</port-all>
            <config>
              <port-all>1</port-all>
              <port-type-all>source-port</port-type-all>
              <protocol-all>any</protocol-all>
            </config>
            <port-type-all>source-port</port-type-all>
            <protocol-all>any</protocol-all>
          </layer4-match-ipv4>
        </layer4-matches-ipv4>
      </match-all-conditions>
    </class-map>
  </class-maps>
</global>
</qos>

```

**Command Syntax**

```
match layer4 (any|tcp|udp) (source-port|destination-port) <1-65535>
```

**Configure qos group**

Use this attribute to classify traffic QoS group

Attribute Name: qos-group

Attribute Type: uint32

Attribute Range: 1-2000

**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps-queuing>
      <class-map-queuing>
        <name>WORD</name>
        <config>
          <name>NAME</name>
        </config>
      <match-conditions>

```

```
<config>
  <qos-group>1</qos-group>
</config>
</match-conditions>
</class-map-queuing>
</class-maps-queuing>
</global>
</qos>
```

### Command Syntax

```
match qos-group <1-2000>
```

---

## Configure vlan queue

Use this attribute to classify traffic based on the VLAN ID

Attribute Name: vlan-queue

Attribute Type: uint16

Attribute Range: 1-4094

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <class-maps-queuing>
      <class-map-queuing>
        <name>WORD</name>
        <config>
          <name>NAME</name>
        </config>
      </class-map-queuing>
    </class-maps-queuing>
  </global>
  <match-conditions>
    <config>
      <vlan-queue>1</vlan-queue> <!-- operation="delete"-->
    </config>
  </match-conditions>
</qos>
```

### Command Syntax

```
match vlan <1-4094>
```

---

## Configure policy map name

Use this attribute to set the policy-map name

Attribute Name: policy-map-name

Attribute Type: string

Attribute Range: 1-32

Attribute Name: type

Attribute Type: enum (qos|queuing|queuing default|vlan-queuing|hybrid-queuing)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map> <!-- operation="delete"-->
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
          <type>l</type>
        </config>
      </policy-map>
    </policy-maps>
  </global>
</qos>
```

### Command Syntax

```
policy-map NAME
```

---

## Configure class map name

Use this attribute to attach a class-map of type qos or queue to the policy-map

Attribute Name: class-map-name

Attribute Type: union

Attribute Name: type

Attribute Type: enum (qos|queuing|queuing default|vlan-queuing|hybrid-queuing)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      <classes>
        <class> <!-- operation="delete"-->
          <class-map-name>NAME</class-map-name>
          <config>
            <class-map-name>NAME</class-map-name>
            <type>qos</type>
          </config>
        </class>
      </classes>
    </policy-map>
```

```

</policy-maps>
</global>
</qos>

```

## Command Syntax

```
class (type (qos)|) NAME
```

---

## Configure child service policy name

Use this attribute to attach a child service-policy to the policy-map

Attribute Name: child-service-policy-name

Attribute Type: string

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
  </global>
  <classes>
    <class>
      <class-map-name>NAME</class-map-name>
      <config>
        <class-map-name>NAME</class-map-name>
        <child-service-policy-name>NAME</child-service-policy-name> <!--
operation="delete"-->
      </config>
    </class>
  </classes>
</qos>

```

## Command Syntax

```
service-policy NAME
```

---

## Configure lossless

Use this attribute to set the lossless setting for queue.

Attribute Name: lossless

Attribute Type: empty

## Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
```

```

<global>
<policy-maps>
<policy-map>
  <policy-map-name>NAME</policy-map-name>
  <config>
    <policy-map-name>NAME</policy-map-name>
  </config>
<classes>
<class>
  <class-map-name>NAME</class-map-name>
  <config>
    <class-map-name>NAME</class-map-name>
  </config>
  <queue-mode>
  <config>
    </lossless><!-- operation="delete"-->
  </config>
</queue-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

```
lossless
```

---

## Configure weighted round robin queue weight

Use this attribute to set the weight for Weighted Round Robin queue scheduling algorithm

Attribute Name: weighted-round-robin-queue-weight

Attribute Type: uint8

Attribute Range: 1-127

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<policy-maps>
<policy-map>
  <policy-map-name>NAME</policy-map-name>
  <config>
    <policy-map-name>NAME</policy-map-name>
  </config>
<classes>
<class>
  <class-map-name>NAME</class-map-name>
  <config>
    <class-map-name>NAME</class-map-name>
  </config>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

```

    </config>
    <queue-mode>
    <config>
        <weighted-round-robin-queue-weight>1</weighted-round-robin-queue-weight>
<!-- operation="delete"-->
    </config>
</queue-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

```
wrr-queue weight <1-127>
```

---

## Configure strict priority enabled

Use this attribute to set Strict Priority as queue scheduling algorithm

Attribute Name: strict-priority-enabled

Attribute Type: empty

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<policy-maps>
<policy-map>
    <policy-map-name>NAME</policy-map-name>
    <config>
        <policy-map-name>NAME</policy-map-name>
    </config>
</classes>
<class>
    <class-map-name>NAME</class-map-name>
    <config>
        <class-map-name>NAME</class-map-name>
    </config>
    <queue-mode>
    <config>
        </strict-priority-enabled><!-- operation="delete"-->
    </config>
</queue-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

priority

---

## Configure weight

Use this attribute to set weight for Weighted Random Early Detection

Attribute Name: weight

Attribute Type: uint8

Attribute Range: 0-15

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
          <queue-mode>
            <red>
              <config>
                <weight>0</weight> <!-- operation="delete"-->
              </config>
            </red>
          </queue-mode>
        </config>
      </class>
    </classes>
  </global>
</qos>
```

## Command Syntax

random-detect weight <0-15>

---

## Configure min threshold

Use this attribute to set Weighted Random Early Detection minimum threshold

Attribute Name: min-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: threshold-unit

Attribute Type: enum (packets|bytes|kbytes)

Attribute Name: drop-probability

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: explicit-congestion-notification

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
          <queue-mode>
            <red>
              <wred>
                <config>
                  <max-threshold>1</max-threshold> <!-- operation="delete"-->
                  <threshold-unit>packets</threshold-unit> <!-- operation="delete"-->
                  <drop-probability>1</drop-probability> <!-- operation="delete"-->
                  </explicit-congestion-notification><!-- operation="delete"-->
                  <min-threshold>1</min-threshold> <!-- operation="delete"-->
                </config>
              </wred>
            </red>
          </queue-mode>
        </config>
      </class>
    </classes>
  </global>
</qos>
```



---

## Command Syntax

```
random-detect <1-524288> <1-524288> (packets|bytes|kbytes) (drop-probability <1-100>|) (ecn|)
```

---

## Configure max threshold

Use this attribute to set Weighted Random Early Detection minimum threshold

Attribute Name: min-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: drop-probability

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: min-threshold-yellow

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold-yellow

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: drop-probability-yellow

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: min-threshold-red

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold-red

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: drop-probability-red

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: threshold-unit

Attribute Type: enum (packets|bytes|kbytes)

Attribute Name: explicit-congestion-notification

Attribute Type: empty

**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<policy-maps>
<policy-map>
  <policy-map-name>NAME</policy-map-name>
  <config>
    <policy-map-name>NAME</policy-map-name>
  </config>
</policy-map>
</policy-maps>
<classes>
<class>
  <class-map-name>NAME</class-map-name>
  <config>
    <class-map-name>NAME</class-map-name>
  </config>
  <queue-mode>
  <red>
  <wred>
  <config>
    <max-threshold>1</max-threshold> <!-- operation="delete"-->
    <drop-probability>1</drop-probability> <!-- operation="delete"-->
    <min-threshold-yellow>1</min-threshold-yellow> <!-- operation="delete"-->
    <max-threshold-yellow>1</max-threshold-yellow> <!-- operation="delete"-->
    <drop-probability-yellow>1</drop-probability-yellow> <!--
operation="delete"-->
    <min-threshold-red>1</min-threshold-red> <!-- operation="delete"-->
    <max-threshold-red>1</max-threshold-red> <!-- operation="delete"-->
    <drop-probability-red>1</drop-probability-red> <!-- operation="delete"-->
    <threshold-unit>packets</threshold-unit> <!-- operation="delete"-->
    </explicit-congestion-notification><!-- operation="delete"-->
    <min-threshold>1</min-threshold> <!-- operation="delete"-->
  </config>
</wred>
</red>
</queue-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

**Command Syntax**

```

random-detect green <1-524288> <1-524288> (drop-probability <1-100>|) yellow <1-
524288> <1-524288> (drop-probability <1-100>|) red <1-524288> <1-524288> (drop-
probability <1-100>|) (packets|bytes|kbytes) (ecn|)

```

**Configure threshold unit**

Use this attribute to set Weighted Random Early Detection minimum threshold

Attribute Name: min-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: threshold-unit

Attribute Type: enum (packets|bytes|kbytes)

Attribute Name: drop-probability

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: explicit-congestion-notification

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
          <queue-mode>
            <red>
              <wred>
                <config>
                  <max-threshold>1</max-threshold> <!-- operation="delete"-->
                  <threshold-unit>packets</threshold-unit> <!-- operation="delete"-->
                  <drop-probability>1</drop-probability> <!-- operation="delete"-->
                  </explicit-congestion-notification><!-- operation="delete"-->
                  <min-threshold>1</min-threshold> <!-- operation="delete"-->
                </config>
              </wred>
            </red>
          </queue-mode>
        </config>
      </class>
    </classes>
  </global>
</qos>
```

```
</global>  
</qos>
```

## Command Syntax

```
random-detect min-threshold <1-524288> max-threshold <1-524288>  
  (packets|bytes|kbytes) (drop-probability <1-100>|) (ecn|)
```

---

## Configure drop probability

Use this attribute to set Weighted Random Early Detection minimum threshold

Attribute Name: min-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: drop-probability

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: min-threshold-yellow

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold-yellow

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: drop-probability-yellow

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: min-threshold-red

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: max-threshold-red

Attribute Type: uint32

Attribute Range: 1-524288

Attribute Name: drop-probability-red

Attribute Type: uint8

Attribute Range: 1-100

Attribute Name: threshold-unit

Attribute Type: enum (packets|bytes|kbytes)

Attribute Name: explicit-congestion-notification

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      <classes>
        <class>
          <class-map-name>NAME</class-map-name>
          <config>
            <class-map-name>NAME</class-map-name>
          </config>
          <queue-mode>
            <red>
              <wred>
                <config>
                  <max-threshold>1</max-threshold> <!-- operation="delete"-->
                  <drop-probability>1</drop-probability> <!-- operation="delete"-->
                  <min-threshold-yellow>1</min-threshold-yellow> <!-- operation="delete"-->
                  <max-threshold-yellow>1</max-threshold-yellow> <!-- operation="delete"-->
                  <drop-probability-yellow>1</drop-probability-yellow> <!--
operation="delete"-->
                  <min-threshold-red>1</min-threshold-red> <!-- operation="delete"-->
                  <max-threshold-red>1</max-threshold-red> <!-- operation="delete"-->
                  <drop-probability-red>1</drop-probability-red> <!-- operation="delete"-->
                  <threshold-unit>packets</threshold-unit> <!-- operation="delete"-->
                  </explicit-congestion-notification><!-- operation="delete"-->
                  <min-threshold>1</min-threshold> <!-- operation="delete"-->
                </config>
              </wred>
            </red>
          </queue-mode>
        </class>
      </classes>
    </policy-map>
  </policy-maps>
</global>
</qos>
```

### Command Syntax

```
random-detect green min-threshold <1-524288> max-threshold <1-524288> (drop-
probability <1-100>|) yellow min-threshold <1-524288> max-threshold <1-524288>
(drop-probability <1-100>|) red min-threshold <1-524288> max-threshold <1-524288>
(drop-probability <1-100>|) (packets|bytes|kbytes) (ecn|)
```

---

## Configure max threshold type

Use this attribute to set tail drop limits on egress queue

Attribute Name: max-threshold-type

Attribute Type: enum (packets|bytes|kbytes)

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
        </config>
        <queue-mode>
          <tail-drops>
            <tail-drop> <!-- operation="delete"-->
              <max-threshold-type>packets</max-threshold-type>
              <config>
                <max-threshold-type>packets</max-threshold-type>
                <max-threshold>1</max-threshold>
              </config>
              <max-threshold>1</max-threshold>
            </tail-drop>
          </tail-drops>
        </queue-mode>
      </class>
    </classes>
  </policy-map>
</policy-maps>
</global>
</qos>
```

### Command Syntax

```
queue-limit <1-524288> (packets|bytes|kbytes)
```

---

## Configure rate value

Use this attribute to set a minimum bandwidth rate on the egress queue

Attribute Name: rate-value

Attribute Type: uint32

**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
          </config>
          <queue-mode>
            <bandwidths>
              <bandwidth> <!-- operation="delete"-->
                <rate-type>kbps</rate-type>
                <config>
                  <rate-type>kbps</rate-type>
                  <rate-value>0</rate-value>
                </config>
                <rate-value>0</rate-value>
              </bandwidth>
            </bandwidths>
          </queue-mode>
        </class>
      </classes>
    </policy-map>
  </policy-maps>
</global>
</qos>

```

**Command Syntax**

```
bandwidth <1-1000000000> (kbps|mbps|gbps)
```

**Configure rate type**

Use this attribute to set a minimum bandwidth rate on the egress queue

Attribute Name: rate-value

Attribute Type: uint32

**Netconf edit-config payload**

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>

```

```

    <config>
      <policy-map-name>NAME</policy-map-name>
    </config>
  </classes>
</class>
  <class-map-name>NAME</class-map-name>
  <config>
    <class-map-name>NAME</class-map-name>
  </config>
  <queue-mode>
  <bandwidths>
    <bandwidth> <!-- operation="delete"-->
      <rate-type>kbps</rate-type>
      <config>
        <rate-type>kbps</rate-type>
        <rate-value>0</rate-value>
      </config>
      <rate-value>0</rate-value>
    </bandwidth>
  </bandwidths>
</queue-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

bandwidth (percent) <1-100>

---

## Configure rate unit

Use this attribute to set a maximum shaping rate on the egress queue

Attribute Name: rate-value

Attribute Type: uint32

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
  </global>
  <classes>
    <class>
      <class-map-name>NAME</class-map-name>
    </class>
  </classes>
</qos>

```



```

<config>
  <class-map-name>NAME</class-map-name>
</config>
<queue-mode>
<shapes>
<shape> <!-- operation="delete"-->
  <rate-unit>kbps</rate-unit>
  <config>
    <rate-unit>kbps</rate-unit>
    <rate-value>0</rate-value>
  </config>
  <rate-value>0</rate-value>
</shape>
</shapes>
</queue-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

```
shape <1-1000000000> (kbps|mbps|gbps)
```

---

## Configure priority

Use this attribute to set the user priority for the class attached to this policy-map

Attribute Name: priority

Attribute Type: uint16

Attribute Range: 1-1000

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<global>
<policy-maps>
<policy-map>
  <policy-map-name>NAME</policy-map-name>
  <config>
    <policy-map-name>NAME</policy-map-name>
  </config>
</policy-map>
</policy-maps>
</global>
</qos>

```

```

        <priority>1</priority> <!-- operation="delete"-->
    </config>
</qos-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

```
priority <1-1000>
```

---

## Configure precedence remark

Use this attribute to match traffic classes set action as change precedence in the egress packet to the defined value. The precedence value range is 0-7. Warning: In CLI show running, precedence values with well-known names (ex.: priority, immediate) will be displayed as such. On Netconf, precedence values will always be numeric. The string type allow up to 13 characters on well-known name.

Attribute Name: precedence-remark

Attribute Type: string

Attribute Range: 1-13

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
          <precedence-remark>WORD</precedence-remark> <!-- operation="delete"-->
        </config>
      </class>
    </classes>
  </global>
</qos>

```

## Command Syntax

```
set precedence WORD
```

---

## Configure cos remark only bridged

Use this attribute to enable remarking only bridged packets

Attribute Name: cos-remark-only-bridged

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
        </config>
        <qos-mode>
          <config>
            <cos-remark-only-bridged>0</cos-remark-only-bridged> <!--
operation="delete"-->
          </config>
        </qos-mode>
      </class>
    </classes>
  </policy-maps>
</global>
</qos>
```

## Command Syntax

```
set bridge cos <0-7>
```

---

## Configure dscp value remark

Use this attribute to match traffic classes set action as change DSCP in the egress packet to the defined value. The DSCP value range is 0-63. Warning: In CLI show running, DSCP values with well-known names (ex.: af11, cs0) will be displayed as such. On Netconf, DSCP values will always be numeric. The string type allow up to 8 characters on well-known name.

Attribute Name: dscp-value-remark

Attribute Type: string

Attribute Range: 1-8

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
    <classes>
      <class>
        <class-map-name>NAME</class-map-name>
        <config>
          <class-map-name>NAME</class-map-name>
        </config>
        <qos-mode>
          <config>
            <dscp-value-remark>WORD</dscp-value-remark> <!-- operation="delete"-->
          </config>
        </qos-mode>
      </class>
    </classes>
  </global>
</qos>
```

### Command Syntax

```
set dscp WORD
```

## Configure dscp remark only bridged

Use this attribute to enable remarking only bridged packets. The DSCP value range is 0-63. Warning: In CLI show running, DSCP values with well-known names (ex.: af11, cs0) will be displayed as such. On Netconf, DSCP values will always be numeric. The string type allow up to 8 characters on well-known name.

Attribute Name: dscp-remark-only-bridged

Attribute Type: string

Attribute Range: 1-8

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
```

```

    <config>
      <policy-map-name>NAME</policy-map-name>
    </config>
  </classes>
</class>
  <class-map-name>NAME</class-map-name>
  <config>
    <class-map-name>NAME</class-map-name>
  </config>
  <qos-mode>
  <config>
    <dscp-remark-only-bridged>WORD</dscp-remark-only-bridged> <!--
operation="delete"-->
  </config>
</qos-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

```
set bridge dscp WORD
```

---

## Configure queue remark only bridged

Use this attribute to enable remarking only bridged packets

Attribute Name: queue-remark-only-bridged

Attribute Type: uint8

Attribute Range: 0-7

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <policy-maps>
      <policy-map>
        <policy-map-name>NAME</policy-map-name>
        <config>
          <policy-map-name>NAME</policy-map-name>
        </config>
      </policy-map>
    </policy-maps>
  </global>
  <class>
    <class-map-name>NAME</class-map-name>
    <config>
      <class-map-name>NAME</class-map-name>
    </config>
  </class>
  <qos-mode>
  <config>

```

```

        <queue-remark-only-bridged>0</queue-remark-only-bridged> <!--
operation="delete"-->
    </config>
</qos-mode>
</class>
</classes>
</policy-map>
</policy-maps>
</global>
</qos>

```

## Command Syntax

```
set bridge queue <0-7>
```

---

## Configure non unicast queue weight

Use this attribute to set action as change qos wrr weigth for non-uc queue in the egress to the defined value for matched packets

Attribute Name: non-unicast-queue-weight

Attribute Type: uint8

Attribute Range: 1-127

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <scheduler-mode>
      <weighted-round-robins>
        <weighted-round-robin> <!-- operation="delete"-->
          <non-unicast-queue-weight>1</non-unicast-queue-weight>
        <config>
          <non-unicast-queue-weight>1</non-unicast-queue-weight>
          <unicast-queue-weight>1</unicast-queue-weight>
        </config>
        <unicast-queue-weight>1</unicast-queue-weight>
      </weighted-round-robin>
    </weighted-round-robins>
  </scheduler-mode>
</global>
</qos>

```

## Command Syntax

```
set qos wrr uc <1-127> non-uc <1-127>
```

---

## Configure enabled

Use this attribute to set strict-priority for scheduler mode of L1 node to WRR

Attribute Name: enabled

Attribute Type: empty

---

**Netconf edit-config payload**

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <scheduler-mode>
      <strict-priority>
        <config>
          </enabled><!-- operation="delete"-->
        </config>
      </strict-priority>
    </scheduler-mode>
  </global>
</qos>
```

**Command Syntax**

```
set qos sp
```

---

**Configure block size**

Use this attribute to configure block-size for vlan-queuing

Attribute Name: block-size

Attribute Type: uint8

Default Value: 1

Attribute Range: 1-8

**Netconf edit-config payload**

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <global>
    <vlan-queuing>
      <config>
        <block-size>1</block-size> <!-- operation="delete"-->
      </config>
    </vlan-queuing>
  </global>
</qos>
```

**Command Syntax**

```
qos vlan-queuing block-size <1-8>
```

---

**clear qos statistics (interface IFNAME|) ((type qos|type qos input|type qos output|type queuing|type all)|)**

Attribute Name: interface-name

Attribute Type: string

Default Value: NULL

Attribute Name: type

Attribute Type: enum (type qos|type qos input|type qos output|type queuing|type all)

Default Value: type all

### Netconf RPC payload

```
<qos-clear-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interface-name>IFNAME</interface-name>
  <type>type all</type>
</qos-clear-statistics>
```

### Command Syntax

```
clear qos statistics (interface IFNAME|) ((type qos|type qos input|type qos
output|type queuing|type all)|)
```

---

## IPI-QOS-IF

---

### Configure untagged priority

Use this attribute to set internal priority for untagged traffic on L2 interface

Attribute Name: untagged-priority

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <untagged-priority>0</untagged-priority> <!-- operation="delete"-->
    </interface>
  </interfaces>
</qos>
```

### Command Syntax

```
qos untagged-priority <0-7>
```

---

### Configure trust dscp

Use this command to classify the ingress traffic based on DSCP map on L2 interface

Attribute Name: trust-dscp

Attribute Type: empty

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
```



```

<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </trust-dscp><!-- operation="delete"-->
</interface>
</interfaces>
</qos>

```

## Command Syntax

```
trust dscp
```

---

## Configure cos

Use this command to enable/disable remarking of CoS set by the egress map

Attribute Name: cos

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <remark>
        <config>
          <cos>disable</cos> <!-- operation="delete"-->
        </config>
      </remark>
    </interface>
  </interfaces>
</qos>

```

## Command Syntax

```
qos remark cos (disable|enable)
```

---

## Configure dei

Use this command to enable/disable remarking of DEI set by the egress map

Attribute Name: dei

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">

```

```

<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <remark>
    <config>
      <dei>disable</dei> <!-- operation="delete"-->
    </config>
  </remark>
</interface>
</interfaces>
</qos>

```

### Command Syntax

```
qos remark dei (disable|enable)
```

---

## Configure dscp

Use this command to enable/disable remarking of DSCP set by the egress map

Attribute Name: dscp

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <remark>
        <config>
          <dscp>disable</dscp> <!-- operation="delete"-->
        </config>
      </remark>
    </interface>
  </interfaces>
</qos>

```

### Command Syntax

```
qos remark dscp (disable|enable)
```

---

## Configure name

Interface name for which QoS is being configured

Attribute Name: name

Attribute Type: string

Attribute Name: rate

Attribute Type: uint64

Attribute Name: rate-unit

Attribute Type: enum (kbps|mbps|gbps)

Attribute Name: burst-rate

Attribute Type: uint64

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface> <!-- operation="delete"-->
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <traffic-shape>
    <config>
      <rate>1</rate>
      <rate-unit>kbps</rate-unit>
      <burst-rate>1</burst-rate>
    </config>
  </traffic-shape>
</interface>
</interfaces>
</qos>
```

### Command Syntax

```
shape rate <1-1000000000> (kbps|mbps|gbps) burst <2-10000000>
```

---

## Configure rate

Interface name for which QoS is being configured

Attribute Name: name

Attribute Type: string

Attribute Name: rate

Attribute Type: uint64

Attribute Name: rate-unit

Attribute Type: enum (kbps|mbps|gbps)

Attribute Name: burst-rate

Attribute Type: uint64

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface> <!-- operation="delete"-->
```

```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<traffic-shape>
  <config>
    <rate>1</rate>
    <rate-unit>kbps</rate-unit>
    <burst-rate>1</burst-rate>
  </config>
</traffic-shape>
</interface>
</interfaces>
</qos>

```

### Command Syntax

```
shape rate <1-1000000000> (kbps|mbps|gbps) burst <2-1000000>
```

---

## Configure cos to queue

Use this attribute to attach a CoS to Traffic-Class profile to the interface

This command is supported when following feature are enabled QoS Mapping profile

Attribute Name: cos-to-queue

Attribute Type: string

### Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
        </config>
        <map-profile>
          <config>
            <cos-to-queue>NAME</cos-to-queue> <!-- operation="delete"-->
          </config>
        </map-profile>
      </interface>
    </interfaces>
  </qos>

```

### Command Syntax

```
qos map-profile cos-to-queue NAME
```

---

## Configure dscp to queue

Use this attribute to attach a DSCP to Traffic-Class profile to the interface

This command is supported when following feature are enabled QoS Mapping profile

Attribute Name: dscp-to-queue

Attribute Type: string

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <map-profile>
    <config>
      <dscp-to-queue>NAME</dscp-to-queue> <!-- operation="delete"-->
    </config>
  </map-profile>
</interface>
</interfaces>
</qos>
```

### Command Syntax

```
qos map-profile dscp-to-queue NAME
```

---

## Configure precedence to queue

Use this attribute to attach a Precedence to Traffic-Class profile to the interface

This command is supported when following feature are enabled QoS Mapping profile

Attribute Name: precedence-to-queue

Attribute Type: string

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <map-profile>
    <config>
      <precedence-to-queue>NAME</precedence-to-queue> <!-- operation="delete"-->
    </config>
  </map-profile>
</interface>
</interfaces>
</qos>
```

---

## Command Syntax

```
qos map-profile precedence-to-queue NAME
```

---

## Configure queue color to cos

Use this attribute to attach a Traffic-Class color to CoS profile to the interface

This command is supported when following feature are enabled QoS Mapping profile

Attribute Name: queue-color-to-cos

Attribute Type: string

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <map-profile>
  <config>
    <queue-color-to-cos>NAME</queue-color-to-cos> <!-- operation="delete"-->
  </config>
</map-profile>
</interface>
</interfaces>
</qos>
```

## Command Syntax

```
qos map-profile queue-color-to-cos NAME
```

---

## Configure queue color to dscp

Use this attribute to attach a Traffic-Class color to DSCP profile to the interface

This command is supported when following feature are enabled QoS Mapping profile

Attribute Name: queue-color-to-dscp

Attribute Type: string

### Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <map-profile>
  <config>
```

```

    <queue-color-to-dscp>NAME</queue-color-to-dscp> <!-- operation="delete"--
>
    </config>
</map-profile>
</interface>
</interfaces>
</qos>

```

## Command Syntax

```
qos map-profile queue-color-to-dscp NAME
```

---

## Configure queue to precedence

Use this attribute to attach a queue color to Precedence profile to the interface

This command is supported when following feature are enabled QoS Mapping profile

Attribute Name: queue-to-precedence

Attribute Type: string

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <map-profile>
    <config>
        <queue-to-precedence>NAME</queue-to-precedence> <!-- operation="delete"--
>
    </config>
</map-profile>
</interface>
</interfaces>
</qos>

```

## Command Syntax

```
qos map-profile queue-to-precedence NAME
```

---

## Configure type qos policy map name

Use this attribute to attach a service-policy of type qos to the interface

Attribute Name: type-qos-policy-map-name

Attribute Type: string

Attribute Range: 1-32

## Netconf edit-config payload

```
<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
```

```

<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
  <interface>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
    <service-policy>
      <ingress>
        <config>
          <type-qos-policy-map-name>NAME</type-qos-policy-map-name> <!--
operation="delete"-->
        </config>
      </ingress>
    </service-policy>
  </interface>
</interfaces>
</qos>

```

## Command Syntax

```
service-policy type qos input NAME
```

---

## Configure type queuing policy map name

Use this attribute to attach a service-policy of type queue to the interface

Attribute Name: type-queuing-policy-map-name

Attribute Type: string

Attribute Range: 1-32

## Netconf edit-config payload

```

<qos xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos">
  <interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-qos-if">
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <service-policy>
        <egress>
          <config>
            <type-queuing-policy-map-name>NAME</type-queuing-policy-map-name> <!--
operation="delete"-->
          </config>
        </egress>
      </service-policy>
    </interface>
  </interfaces>
</qos>

```



---

## Command Syntax

```
service-policy type queuing output NAME
```

---

# IPI-MCEC

---

## Configure options

Use this attribute to debug the mlag feature.

Attribute Name: options

Attribute Type: bits (hello|info|timer|event|cli|mac-sync|stp|all)

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <debug>
    <config>
      <options>hello</options> <!-- operation="delete"-->
    </config>
  </debug>
</mcec>
```

## Command Syntax

```
debug mcec (hello|info|timer|event|cli|mac-sync|stp|all)
```

---

## Configure mcec strict active standby

Use this attribute to set mcec strict active standby

Attribute Name: mcec-strict-active-standby

Attribute Type: empty

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <domain>
    <config>
      </mcec-strict-active-standby><!-- operation="delete"-->
    </config>
  </domain>
</mcec>
```

## Command Syntax

```
mcec strict-active-standby disable
```

---

## Configure system number

Use this attribute to configure domain system number, which uniquely identifies domain system in MCEC domain

Attribute Name: system-number

Attribute Type: uint8

Attribute Range: 1-2

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <domain>
    <config>
      <system-number>1</system-number> <!-- operation="delete"-->
    </config>
  </domain>
</mcec>
```

### Command Syntax

```
domain-system-number <1-2>
```

---

## Configure address

Use this attribute configure domain address, which helps to identify the MCEC domain

Attribute Name: address

Attribute Type: string

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <domain>
    <config>
      <address>MAC</address> <!-- operation="delete"-->
    </config>
  </domain>
</mcec>
```

### Command Syntax

```
domain-address MAC
```

---

## Configure priority

Use this attribute to specify the priority value associated with MCEC domain

Attribute Name: priority

Attribute Type: uint16

Default Value: 32768

Attribute Range: 1-65535

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <domain>
    <config>
      <priority>1</priority> <!-- operation="delete"-->
    </config>
  </domain>
</mcec>
```

```
</domain>
</mcec>
```

## Command Syntax

```
domain-priority <1-65535>
```

---

## Configure hello timeout

Use this attribute to specify the domain hello-timeout value

Attribute Name: hello-timeout

Attribute Type: enum (long|short)

Default Value: long

## Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
<domain>
<config>
  <hello-timeout>long</hello-timeout> <!-- operation="delete"-->
</config>
</domain>
</mcec>
```

## Command Syntax

```
domain-hello-timeout (long|short)
```

---

## Configure interface

Use this attribute to map an interface as intra domain link that connects the domain system with its neighbour in a mcec domain

Attribute Name: interface

Attribute Type: string

## Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
<intra-domain>
<peer-link>
<config>
  <interface>IFNAME</interface> <!-- operation="delete"-->
</config>
</peer-link>
</intra-domain>
</mcec>
```

## Command Syntax

```
intra-domain-link IFNAME
```

---

## Configure higid

Turn on/off higid on inter domain link

Attribute Name: higid

Attribute Type: empty

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <intra-domain>
    <peer-link>
      <config>
        </higid><!-- operation="delete"-->
      </config>
    </peer-link>
  </intra-domain>
</mcec>
```

### Command Syntax

```
idl-higid
```

---

## Configure vrf

vrf of the peer DSN node

Attribute Name: vrf

Attribute Type: string

Attribute Name: peer-address

Attribute Type: inet:ipv4-address

Attribute Name: local-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <intra-domain>
    <peer-address>
      <config>
        <peer-address>A.B.C.D</peer-address>
        <local-address>A.B.C.D</local-address>
        <vrf>VRF_NAME</vrf>
      </config>
    </peer-address>
  </intra-domain>
</mcec>
```

### Command Syntax

```
intra-domain-peer A.B.C.D source-address A.B.C.D (vrf VRF_NAME|)
```

---

## Configure interface mode

Use this attribute to set the MC-LAG mode. active-standby: The interface is ready to transition from active to standby state should a failure occur in the other node.

Attribute Name: interface-mode

Attribute Type: enum (active-standby|active-active)

Default Value: active-active

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <mrag-interfaces>
    <mrag-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <interface-mode>active-active</interface-mode> <!-- operation="delete"-->
    </mrag-interface>
  </mrag-interfaces>
</mcec>
```

### Command Syntax

```
mode (active-standby|active-active)
```

---

## Configure revertive timer

Use this attribute to set the timer for MC-LAG switchover revertive type. After Revertive timer expires Slave will handover the control to Master Node. If a failure happens that triggers a switchover, after failure recovery the initially-active node becomes active again. Default switchover type is revertive 10s.

Attribute Name: revertive-timer

Attribute Type: uint8

Default Value: 10

Attribute Range: 1-255

### Netconf edit-config payload

```
<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <mrag-interfaces>
    <mrag-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <switchover-type>
        <config>
          <revertive-timer>1</revertive-timer> <!-- operation="delete"-->
        </config>
      </switchover-type>
    </mrag-interface>
  </mrag-interfaces>
</mcec>
```

```

</mlog-interface>
</mlog-interfaces>
</mcec>

```

## Command Syntax

```
switchover type revertive <1-255>
```

---

## Configure enable non revertive

Use this attribute to set the MC-LAG switchover to non-revertive type. Do not switch back to the initially-active node after failure recovery. Default switchover type is revertive 10s.

Attribute Name: enable-non-revertive

Attribute Type: empty

## Netconf edit-config payload

```

<mcec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <mlog-interfaces>
    <mlog-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <switchover-type>
      <config>
        </enable-non-revertive><!-- operation="delete"-->
      </config>
    </switchover-type>
  </mlog-interface>
</mlog-interfaces>
</mcec>

```

## Command Syntax

```
switchover type non-revertive
```

---

## debug mcec (hello|info|timer|event|cli|mac-sync|stp|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (hello|info|timer|event|cli|mac-sync|stp|all)

## Netconf RPC payload

```

<mcec-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <terminal-debug-options>hello</terminal-debug-options>
</mcec-terminal-debug-on>

```

## Command Syntax

```
debug mcec (hello|info|timer|event|cli|mac-sync|stp|all)
```

---

## no debug mcec (hello|info|timer|event|cli|mac-sync|stp|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (hello|info|timer|event|cli|mac-sync|stp|all)

### Netconf RPC payload

```
<mcec-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec">
  <terminal-debug-options>hello</terminal-debug-options>
</mcec-terminal-debug-off>
```

### Command Syntax

```
no debug mcec (hello|info|timer|event|cli|mac-sync|stp|all)
```

---

## clear mcec statistics

### Netconf RPC payload

```
<clear-mcec-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec"/>
```

### Command Syntax

```
clear mcec statistics
```

---

## reload-trigger-mcec-notification

### Netconf RPC payload

```
<trigger-reload xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mcec"/>
```

### Command Syntax

```
reload-trigger-mcec-notification
```

---

# IPI-MLAG

---

## Configure mlag id

MLAG group number

Attribute Name: mlag-id

Attribute Type: uint16

Attribute Range: 1-255

### Netconf edit-config payload

```
<interfaces xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-interface">
  <interface>
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
```

```

</config>
<mrag-aggregation xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrag">
<config>
    <mrag-id>1</mrag-id>
</config>
</mrag-aggregation>
</interface>
</interfaces>

```

### Command Syntax

```
mrag <1-255>
```

---

## reload-trigger-save-mrag-info

### Netconf RPC payload

```
<trigger-save-mrag-info xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-mrag"/>
```

### Command Syntax

```
reload-trigger-save-mrag-info
```

---

## IPI-PLATFORM

---

### Configure enable cmm

Use this attribute to turn on debugging for chassis monitoring

Attribute Name: enable-cmm

Attribute Type: empty

### Netconf edit-config payload

```

<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<debug>
<config>
    </enable-cmm><!-- operation="delete"-->
</config>
</debug>
</components>

```

### Command Syntax

```
debug cmm
```

---

### Configure enable ddm

Use this attribute to turn on debugging for digital diagnostic monitoring

Attribute Name: enable-ddm

Attribute Type: empty



---

**Netconf edit-config payload**

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <debug>
    <config>
      </enable-ddm><!-- operation="delete"-->
    </config>
  </debug>
</components>
```

**Command Syntax**

```
debug ddm
```

---

**Configure warning repeat**

To enable cmm warning level logs to repeat.

Attribute Name: warning-repeat

Attribute Type: empty

**Netconf edit-config payload**

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <global>
    <config>
      </warning-repeat><!-- operation="delete"-->
    </config>
  </global>
</components>
```

**Command Syntax**

```
cmm warning repeat
```

---

**Configure locator led enable**

To set the locator-led on or off.

Attribute Name: locator-led-enable

Attribute Type: empty

**Netconf edit-config payload**

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <global>
    <config>
      </locator-led-enable><!-- operation="delete"-->
    </config>
  </global>
</components>
```

**Command Syntax**

```
locator-led on
```

---

## Configure ddm monitor time interval

To set DDM Monitor interval time.

Attribute Name: ddm-monitor-time-interval

Attribute Type: uint16

Attribute Range: 60-3600

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <global>
    <config>
      <ddm-monitor-time-interval>60</ddm-monitor-time-interval> <!--
operation="delete"-->
    </config>
  </global>
</components>
```

### Command Syntax

```
ddm monitor interval <60-3600>
```

---

## Configure service unsupported transceiver

To enable DDM Monitor for unsupported transceivers at user risk.

Attribute Name: service-unsupported-transceiver

Attribute Type: empty

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <global>
    <config>
      </service-unsupported-transceiver><!-- operation="delete"-->
    </config>
  </global>
</components>
```

### Command Syntax

```
service unsupported-transceiver
```

---

## Configure enable ddm monitor

To enable DDM monitor for all transceivers.

Attribute Name: enable-ddm-monitor

Attribute Type: empty

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <global>
```

```

<config>
  </enable-ddm-monitor><!-- operation="delete"-->
</config>
</global>
</components>

```

## Command Syntax

```
ddm monitor all
```

---

## Configure system 15min load avg alarm

System 15min average load for alarm

Attribute Name: system-15min-load-avg-alarm

Attribute Type: uint8

Attribute Range: 51-100

## Netconf edit-config payload

```

<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<global>
<system-load-average-thresholds>
<system-load-average-threshold> <!-- operation="delete"-->
  <system-15min-load-avg-alarm>51</system-15min-load-avg-alarm>
  <config>
    <system-15min-load-avg-alarm>51</system-15min-load-avg-alarm>
    <system-5min-load-avg-alarm>51</system-5min-load-avg-alarm>
    <system-1min-load-avg-alarm>51</system-1min-load-avg-alarm>
    <system-1min-load-avg-warning-threshold>41</system-1min-load-avg-warning-
threshold>
  </config>
  <system-5min-load-avg-alarm>51</system-5min-load-avg-alarm>
  <system-1min-load-avg-alarm>51</system-1min-load-avg-alarm>
  <system-1min-load-avg-warning-threshold>41</system-1min-load-avg-warning-
threshold>
</system-load-average-threshold>
</system-load-average-thresholds>
</global>
</components>

```

## Command Syntax

```

system-load-average 1min warning <41-100> alarm <51-100> 5min alarm <51-100> 15min
alarm <51-100>

```

---

## Configure alarm threshold

Cpu threshold for alarm

Attribute Name: alarm-threshold

Attribute Type: uint8

Attribute Range: 91-100

**Netconf edit-config payload**

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <global>
    <cpu-core-usage-thresholds>
      <cpu-core-usage-threshold> <!-- operation="delete"-->
        <alarm-threshold>91</alarm-threshold>
        <config>
          <alarm-threshold>91</alarm-threshold>
          <warning-threshold>51</warning-threshold>
        </config>
        <warning-threshold>51</warning-threshold>
      </cpu-core-usage-threshold>
    </cpu-core-usage-thresholds>
  </global>
</components>
```

**Command Syntax**

```
cpu-core-usage warning <51-100> alarm <91-100>
```

---

**Configure monitor port**

To enable DDM monitor for current transceiver.

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: monitor-port

Attribute Type: enum (disable|enable)

**Netconf edit-config payload**

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <monitor-port>disable</monitor-port> <!-- operation="delete"-->
    </interface>
  </interfaces>
</components>
```

**Command Syntax**

```
ddm monitor (disable|enable)
```

---

**Configure poe enable**

To enable PoE for current interface.

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: poe-enable

Attribute Type: empty

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  </poe-enable><!-- operation="delete"-->
</interface>
</interfaces>
</components>
```

### Command Syntax

poe-enable

---

## Configure transceiver code

To set transceiver code for current transceiver.

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: transceiver-code

Attribute Type: enum (1000base-sx|1000base-lx|1000base-ex|1000base-cx|10gbase-sr|10gbase-lr|10gbase-er|10gbase-cr|25gbase-sr|25gbase-lr|25gbase-er|25gbase-cr|40gbase-sr4|40gbase-lr4|40gbase-er4|40gbase-cr4|100gbase-sr4|100gbase-lr4|100gbase-er4|100gbase-cr4)

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
    <transceiver-code>1000base-sx</transceiver-code> <!-- operation="delete"-->
  </config>
</interface>
</interfaces>
</components>
```

### Command Syntax

```
transceiver (1000base-sx|1000base-lx|1000base-ex|1000base-cx|10gbase-sr|10gbase-
lr|10gbase-er|10gbase-cr|25gbase-sr|25gbase-lr|25gbase-er|25gbase-cr|40gbase-
sr4|40gbase-lr4|40gbase-er4|40gbase-cr4|100gbase-sr4|100gbase-lr4|100gbase-
er4|100gbase-cr4)
```

---

## Configure wavelength

wavelength

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: wavelength

Attribute Type: union

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <wavelength>CML_WAVELENGTH_T</wavelength>
    </interface>
  </interfaces>
</components>
```

### Command Syntax

```
wavelength (channel-number <1-96>|update <1528773-1566723>)
```

---

## Configure tx disable

To disable laser tx for current transceiver.

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: tx-disable

Attribute Type: empty

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      </tx-disable><!-- operation="delete"-->
    </interface>
  </interfaces>
</components>
```

### Command Syntax

```
tx-disable
```

---

## Configure edfa operating mode

To set the EDFA operating mode

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: edfa-operating-mode

Attribute Type: enum (agc|apc)

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <edfa-operating-mode>agc</edfa-operating-mode> <!-- operation="delete"-->
</interface>
</interfaces>
</components>
```

### Command Syntax

```
edfa operating-mode (agc|apc)
```

---

## Configure edfa target output power

To configure the target output power value in dBm

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: edfa-target-output-power

Attribute Type: decimal64

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<interfaces>
<interface>
  <interface-name>WORD</interface-name>
  <config>
    <interface-name>WORD</interface-name>
  </config>
  <edfa-target-output-power>VALUE</edfa-target-output-power> <!--
operation="delete"-->
</interface>
</interfaces>
</components>
```

### Command Syntax

```
edfa target-outpwr VALUE
```

---

## Configure edfa target gain

To set the target-gain

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: edfa-target-gain

Attribute Type: decimal64

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <edfa-target-gain>VALUE</edfa-target-gain> <!-- operation="delete"-->
    </interface>
  </interfaces>
</components>
```

### Command Syntax

```
edfa target-gain VALUE
```

---

## Configure tx cdr bypass

Bypass the TX CDR control

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: tx-cdr-bypass

Attribute Type: empty

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      </tx-cdr-bypass><!-- operation="delete"-->
    </interface>
  </interfaces>
</components>
```

### Command Syntax

```
tx cdr-bypass
```

---

## Configure rx cdr bypass

Bypass the CDR control

This command is supported when following feature are disabled Tibit MicroPlug OLT feature

Attribute Name: rx-cdr-bypass



Attribute Type: empty

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interfaces>
    <interface>
      <interface-name>WORD</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      </rx-cdr-bypass><!-- operation="delete"-->
    </interface>
  </interfaces>
</components>
```

### Command Syntax

```
rx cdr-bypass
```

---

## Configure interval

To set disk activity sampling window interval time.

Attribute Name: interval

Attribute Type: uint16

Attribute Range: 30-1200

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <disk-activity-monitoring>
    <config>
      <interval>30</interval> <!-- operation="delete"-->
    </config>
  </disk-activity-monitoring>
</components>
```

### Command Syntax

```
disk-activity-monitoring interval <30-1200>
```

---

## Configure read threshold

To set disk read activity alarm threshold.

Attribute Name: read-threshold

Attribute Type: uint32

Attribute Range: 1-20000

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <disk-activity-monitoring>
```

```
<config>
  <read-threshold>1</read-threshold> <!-- operation="delete"-->
</config>
</disk-activity-monitoring>
</components>
```

### Command Syntax

```
disk-activity-monitoring threshold read <1-20000>
```

---

## Configure write threshold

To set disk write activity alarm threshold.

Attribute Name: write-threshold

Attribute Type: uint32

Attribute Range: 1-20000

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <disk-activity-monitoring>
    <config>
      <write-threshold>1</write-threshold> <!-- operation="delete"-->
    </config>
  </disk-activity-monitoring>
</components>
```

### Command Syntax

```
disk-activity-monitoring threshold write <1-20000>
```

---

## Configure temperature policy

Set temperature policy

Attribute Name: temperature-policy

Attribute Type: enum (sys-halt|sys-reboot|none)

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <temperature>
    <config>
      <temperature-policy>sys-halt</temperature-policy> <!-- operation="delete"-->
    </config>
  </temperature>
</components>
```

### Command Syntax

```
temperature policy (sys-halt|sys-reboot|none)
```

---

## Configure sensor id

Sensor ID

Attribute Name: sensor-id

Attribute Type: uint8

Attribute Range: 1-15

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <temperature>
    <thresholds>
      <threshold> <!-- operation="delete"-->
        <sensor-id>1</sensor-id>
        <config>
          <sensor-id>1</sensor-id>
        </config>
      </threshold>
    </thresholds>
  </temperature>
</components>
```

### Command Syntax

```
temperature threshold <1-15>
```

---

## Configure value

Value to over-write temperature sensor threshold

Attribute Name: value

Attribute Type: int16

Attribute Range: -50-150

### Netconf edit-config payload

```
<components xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <temperature>
    <thresholds>
      <threshold>
        <sensor-id>1</sensor-id>
        <config>
          <sensor-id>1</sensor-id>
        </config>
      </threshold>
    </thresholds>
  <severities>
    <severity>
      <severity>emer-max</severity>
      <config>
        <severity>emer-max</severity>
      </config>
    </severity>
  </severities>
  <value>-50</value> <!-- operation="delete"-->
</components>
```

```

</severity>
</severities>
</threshold>
</thresholds>
</temperature>
</components>

```

### Command Syntax

```
(emer-max|alrt-max|crit-max|crit-min|alrt-min|emer-min) <-50-150>
```

---

## clear ddm transceiver alarm all

### Netconf RPC payload

```
<ddm-clear-transceiver-alarm-all xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-platform"/>
```

### Command Syntax

```
clear ddm transceiver alarm all
```

---

## clear ddm transceiver alarm

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```

<ddm-clear-transceiver-alarm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
platform">
  <name>WORD</name>
</ddm-clear-transceiver-alarm>

```

### Command Syntax

```
clear ddm transceiver alarm
```

---

## debug ddm

### Netconf RPC payload

```
<cmm-terminal-debug-ddm-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
platform"/>
```

### Command Syntax

```
debug ddm
```

---

## no debug ddm

### Netconf RPC payload

```
<cmm-terminal-debug-ddm-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
platform"/>
```

---

## Command Syntax

```
no debug ddm
```

---

## debug cmm

### Netconf RPC payload

```
<cmm-terminal-debug-cmm-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
platform"/>
```

### Command Syntax

```
debug cmm
```

---

## no debug cmm

### Netconf RPC payload

```
<cmm-terminal-debug-cmm-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
platform"/>
```

### Command Syntax

```
no debug cmm
```

---

# IPI-PLATFORM-PROFILE

---

## Configure route mode

This Object is to check forwarding profile limit

This command is supported when following feature are enabled bcm uft feature and following feature are disabled dune feature

Attribute Name: route-mode

Attribute Type: enum (narrow|wide)

Default Value: wide

### Netconf edit-config payload

```
<forwarding-profile-route-modes xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
platform">  
  <config>  
    <route-mode>wide</route-mode> <!-- operation="delete"-->  
  </config>  
</forwarding-profile-route-modes>
```

### Command Syntax

```
forwarding-profile route-mode (narrow|wide)
```

---

## Configure egress ipv6

Use this attribute to enable or disable Egress IPv6 filter groups. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: egress-ipv6

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        <egress-ipv6>disable</egress-ipv6> <!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter egress-ipv6 (disable|enable)
```

---

## Configure ingress ipv6 acl

Use this attribute to enable or disable Ingress IPv6 filter groups. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: ingress-ipv6-acl

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        <ingress-ipv6-acl>disable</ingress-ipv6-acl> <!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter ingress-ipv6 (disable|enable)
```

---

## Configure ingress ipv4 custom0

Use this attribute to enable or disable Ingress IPv4 filter groups. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: ingress-ipv4-custom0

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        <ingress-ipv4-custom0>disable</ingress-ipv4-custom0> <!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter ingress-ipv4 (disable|enable)
```

---

## Configure ingress arp

Use this attribute to enable or disable Ingress ARP filter groups.

This command is supported when following feature are enabled broadcom feature

Attribute Name: ingress-arp

Attribute Type: empty

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        </ingress-arp><!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter ingress-arp enable
```

---

## Configure ingress mirror

Use this attribute to enable or disable Ingress Mirror filter groups. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: ingress-mirror

Attribute Type: empty

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        </ingress-mirror><!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter ingress-mirror enable
```

---

## Configure ingress bfd

Use this attribute to enable or disable Ingress BFD filter groups. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: ingress-bfd

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        <ingress-bfd>disable</ingress-bfd> <!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter bfd-group (disable|enable)
```

---

## Configure ipsg ipv6

Use this attribute to enable or disable IP Source Guard(IPSG) ipv6 filter groups. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: ipsg-ipv6



Attribute Type: empty

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        </ipsg-ipv6><!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter ipsg-ipv6 enable
```

---

## Configure isolation

Use this attribute to enable or disable port isolation. Disabling filter groups increases the configurable filter entries.

This command is supported when following feature are enabled broadcom feature

Attribute Name: isolation

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <hardware-profile>
    <filters>
      <config>
        <isolation>disable</isolation> <!-- operation="delete"-->
      </config>
    </filters>
  </hardware-profile>
</profiles>
```

### Command Syntax

```
hardware-profile filter port-isolation (disable|enable)
```

---

## Configure profile

This Object is to check forwarding profile limit

This command is supported when following feature are enabled bcm uft feature and following feature are disabled dune feature

Attribute Name: profile

Attribute Type: enum (l2-profile-one|l2-profile-two|l2-profile-three|l3-profile|l3-128bit-profile|lpm-profile|lpm-128bit-profile|custom-profile)

Default Value: l2-profile-three

**Netconf edit-config payload**

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <forwarding-profiles>
    <config>
      <profile>l2-profile-three</profile> <!-- operation="delete"-->
    </config>
  </forwarding-profiles>
</profiles>
```

**Command Syntax**

```
forwarding profile (l2-profile-one|l2-profile-two|l2-profile-three|l3-profile|l3-
  128bit-profile|lpm-profile)
```

---

**Configure mpls ip payload**

This Object is set for load balancing based on MPLS IP payload

This command is supported when following feature are enabled broadcom feature

Attribute Name: mpls-ip-payload

Attribute Type: empty

Attribute Name: mpls-label-based

Attribute Type: empty

**Netconf edit-config payload**

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <config>
      </mpls-label-based><!-- operation="delete"-->
      </mpls-ip-payload><!-- operation="delete"-->
    </config>
  </load-balance>
</hardware>
```

**Command Syntax**

```
load-balance rtag7 mpls labels ip-payload
```

---

**Configure mpls label based**

This Object is set for load balancing based on mpls labels

This command is supported when following feature are enabled broadcom feature

Attribute Name: mpls-label-based

Attribute Type: empty

Attribute Name: mpls-ip-payload

Attribute Type: empty

---

**Netconf edit-config payload**

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <config>
      </mpls-ip-payload><!-- operation="delete"-->
      </mpls-label-based><!-- operation="delete"-->
    </config>
  </load-balance>
</hardware>
```

**Command Syntax**

```
load-balance rtag7 mpls ip-payload labels
```

---

**Configure enable**

This Object is set loadBalance

This command is supported when following feature are enabled broadcom feature

Attribute Name: enable

Attribute Type: empty

**Netconf edit-config payload**

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <config>
      </enable>
    </config>
  </load-balance>
</hardware>
```

**Command Syntax**

```
load-balance rtag7
```

---

**Configure hash**

This Object is used to set (hash values)CRC

This command is supported when following feature are enabled broadcom feature

Attribute Name: hash

Attribute Type: enum (crc16-bisync|crc16-ccitt|crc32-lo|crc32-hi)

**Netconf edit-config payload**

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <config>
      <hash>crc16-bisync</hash> <!-- operation="delete"-->
    </config>
  </load-balance>
</hardware>
```

## Command Syntax

```
load-balance rtag7 hash (crc16-bisync|crc16-ccitt|crc32-lo|crc32-hi)
```

---

## Configure macro flow based

macro-flow based dynamic hash selection

This command is supported when following feature are enabled broadcom feature

Attribute Name: macro-flow-based

Attribute Type: empty

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <config>
      </macro-flow-based><!-- operation="delete"-->
    </config>
  </load-balance>
</hardware>
```

## Command Syntax

```
load-balance rtag7 macro-flow
```

---

## Configure vlan based

This Object is set for Vlan based load balancing

This command is supported when following feature are enabled L2 feature,broadcom feature

Attribute Name: vlan-based

Attribute Type: empty

Attribute Name: dest-mac-based

Attribute Type: empty

Attribute Name: src-mac-based

Attribute Type: empty

Attribute Name: ether-type-based

Attribute Type: empty

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <l2>
      <config>
        </dest-mac-based><!-- operation="delete"-->
        </src-mac-based><!-- operation="delete"-->
        </ether-type-based><!-- operation="delete"-->
        </vlan-based><!-- operation="delete"-->
      </config>
    </l2>
  </load-balance>
</hardware>
```

```

</config>
</l2>
</load-balance>
</hardware>

```

## Command Syntax

```
load-balance rtag7 l2 { dest-mac| src-mac| ether-type| vlan }
```

---

## Configure symmetric

Symmetric load balancing

This command is supported when following feature are enabled L3 feature,broadcom feature

Attribute Name: symmetric

Attribute Type: empty

Attribute Name: src-ipv4-address-based

Attribute Type: empty

Attribute Name: dest-ipv4-address-based

Attribute Type: empty

Attribute Name: src-l4-port-based

Attribute Type: empty

Attribute Name: dest-l4-port-based

Attribute Type: empty

Attribute Name: protocol-id-based

Attribute Type: empty

## Netconf edit-config payload

```

<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <ipv4>
      <config>
        </src-ipv4-address-based><!-- operation="delete"-->
        </dest-ipv4-address-based><!-- operation="delete"-->
        </src-l4-port-based><!-- operation="delete"-->
        </dest-l4-port-based><!-- operation="delete"-->
        </protocol-id-based><!-- operation="delete"-->
        </symmetric><!-- operation="delete"-->
      </config>
    </ipv4>
  </load-balance>
</hardware>

```

## Command Syntax

```
load-balance rtag7 ipv4 { src-ipv4| dest-ipv4| srcl4-port| destl4-port| protocol-
id| symmetric }
```

---

## Configure src ipv6 address based

Symmetric load balancing

This command is supported when following feature are enabled L3 feature,broadcom feature

Attribute Name: symmetric

Attribute Type: empty

Attribute Name: src-ipv6-address-based

Attribute Type: empty

Attribute Name: dest-ipv6-address-based

Attribute Type: empty

Attribute Name: src-l4-port-based

Attribute Type: empty

Attribute Name: dest-l4-port-based

Attribute Type: empty

Attribute Name: next-header-based

Attribute Type: empty

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <ipv6>
      <config>
        </src-ipv6-address-based><!-- operation="delete"-->
        </dest-ipv6-address-based><!-- operation="delete"-->
        </src-l4-port-based><!-- operation="delete"-->
        </dest-l4-port-based><!-- operation="delete"-->
        </next-header-based><!-- operation="delete"-->
        </symmetric><!-- operation="delete"-->
      </config>
    </ipv6>
  </load-balance>
</hardware>
```

### Command Syntax

```
load-balance rtag7 ipv6 { src-ipv6| dest-ipv6| srcl4-port| destl4-port| next-hdr|
  symmetric }
```

---

## Configure queue name

This attribute specifies CPU queue name for rate limiting config

Attribute Name: queue-name

Attribute Type: enum (best-effort|ipmc-miss|l3-miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)

Attribute Name: rate

Attribute Type: int32

Attribute Range: 0-100000

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <cpu-queue>
    <rate-limits>
      <rate-limit>
        <queue-name>best-effort</queue-name>
        <config>
          <queue-name>best-effort</queue-name>
          <rate>0</rate>
        </config>
      </rate-limit>
    </rate-limits>
  </cpu-queue>
</hardware>
```

### Command Syntax

```
cpu-queue (best-effort|ipmc-miss|l3-
  miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)
rate <0-100000>
```

---

## Configure monitor

This attribute specifies CPU queue name for rate limiting config

Attribute Name: queue-name

Attribute Type: enum (best-effort|ipmc-miss|l3-miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)

Attribute Name: monitor

Attribute Type: enum (no-monitor|monitor)

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <cpu-queue>
    <rate-limits>
      <rate-limit>
        <queue-name>best-effort</queue-name>
        <config>
          <queue-name>best-effort</queue-name>
          <monitor>no-monitor</monitor>
        </config>
      </rate-limit>
    </rate-limits>
  </cpu-queue>
</hardware>
```

## Command Syntax

```
cpu-queue (best-effort|ipmc-miss|l3-
miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)
(no-monitor|monitor)
```

---

## Configure lossy

This attribute specifies CPU queue name for rate limiting config

Attribute Name: queue-name

Attribute Type: enum (best-effort|ipmc-miss|l3-miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)

Attribute Name: lossy

Attribute Type: enum (lossless|lossy)

## Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <cpu-queue>
    <rate-limits>
      <rate-limit>
        <queue-name>best-effort</queue-name>
        <config>
          <queue-name>best-effort</queue-name>
          <lossy>lossless</lossy>
        </config>
      </rate-limit>
    </rate-limits>
  </cpu-queue>
</hardware>
```

## Command Syntax

```
cpu-queue (best-effort|ipmc-miss|l3-
miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)
(lossless|lossy)
```

---

## Configure rate

This attribute specifies CPU queue name for rate limiting config

Attribute Name: queue-name

Attribute Type: enum (best-effort|ipmc-miss|l3-miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)

Attribute Name: rate

Attribute Type: int32

Attribute Range: 0-100000

Attribute Name: monitor

Attribute Type: enum (no-monitor|monitor)



**Netconf edit-config payload**

```

<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <cpu-queue>
    <rate-limits>
      <rate-limit>
        <queue-name>best-effort</queue-name>
        <config>
          <queue-name>best-effort</queue-name>
          <rate>0</rate>
          <monitor>no-monitor</monitor>
        </config>
      </rate-limit>
    </rate-limits>
  </cpu-queue>
</hardware>

```

**Command Syntax**

```

cpu-queue (best-effort|ipmc-miss|l3-
  miss|sflow|bgp|vrrp|rip|ospf|dhcp|nd|pim|arp|igmp|bpdu|ccm|bfd|isis|acl|vxlan)
rate <0-100000> (no-monitor|monitor)

```

---

**cpu-q-default rate <0-100000>**

Attribute Name: rate

Attribute Type: uint32

Attribute Range: 0-100000

**Netconf RPC payload**

```

<ipi-platform-profile_platform-profile-cpu-q-rate-set xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-platform">
  <rate>0</rate>
</ipi-platform-profile_platform-profile-cpu-q-rate-set>

```

**Command Syntax**

```
cpu-q-default rate <0-100000>
```

---

**no cpu-q-default rate**

Attribute Name: rate

Attribute Type: empty

**Netconf RPC payload**

```

<ipi-platform-profile_platform-profile-cpu-q-rate-unset xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-platform">
  <rate>CML_EMPTY_T</rate>
</ipi-platform-profile_platform-profile-cpu-q-rate-unset>

```

**Command Syntax**

```
no cpu-q-default rate
```

---

## IPI-PLATFORM-PROFILE-EXTENDED

---

### Configure enable mac ageing timer

Use this command to enable or disable the MAC ageing timer calculation in control plane

This command is supported when following feature are disabled marvell feature

Attribute Name: enable-mac-ageing-timer

Attribute Type: empty

#### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <mac-ageing>
    <config>
      </enable-mac-ageing-timer><!-- operation="delete"-->
    </config>
  </mac-ageing>
</hardware>
```

#### Command Syntax

```
mac-ageing-display
```

---

### Configure soc

Attribute to indicate the SoC running on this platform. This attribute cannot be configured.

This command is supported when following feature are disabled marvell feature

Attribute Name: soc

Attribute Type: enum

(qax|qux|qmx|dnx|tomahawk|tomahawk2|tomahawk3|tomahawkplus|trident2|trident2plus|trident3|helix4|saber2|maverick2|hurricane4|trident4|tomahawk4|unknown)

#### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <platform>
    <config>
      <soc>qax</soc> <!-- operation="delete"-->
    </config>
  </platform>
</hardware>
```

#### Command Syntax

```
platform-extended-soc
(qax|qux|qmx|dnx|tomahawk|tomahawk2|tomahawk3|tomahawkplus|trident2|trident2plus|trident3|helix4|saber2|maverick2|hurricane4|trident4|tomahawk4|unknown)
```

---

## Configure lpm banks

Use this attribute to set Sets memory allocation profile - Use 'show forwarding profile limit' to check size

This command is supported when following feature are enabled bcm uft feature and following feature are disabled dune feature,marvell feature

Attribute Name: lpm-banks

Attribute Type: enum (2)

Attribute Name: l2-banks

Attribute Type: uint8

Attribute Range: 1-24

Attribute Name: l3-banks

Attribute Type: uint8

Attribute Range: 1-23

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <forwarding-profiles>
    <custom-profile>
      <config>
        <l2-banks>1</l2-banks> <!-- operation="delete"-->
        <l3-banks>1</l3-banks> <!-- operation="delete"-->
        <lpm-banks>2</lpm-banks> <!-- operation="delete"-->
      </config>
    </custom-profile>
  </forwarding-profiles>
</profiles>
```

### Command Syntax

```
forwarding custom-profile { l2-banks <1-24>| l3-banks <1-23>| lpm-banks (2) }
```

---

## Configure ep vlan xlate banks

Use this attribute to set Sets memory allocation profile - Use 'show forwarding profile limit' to check size

This command is supported when following feature are enabled bcm uft feature and following feature are disabled dune feature,marvell feature

Attribute Name: ep-vlan-xlate-banks

Attribute Type: uint8

Attribute Range: 1-23

Attribute Name: l2-banks

Attribute Type: uint8

Attribute Range: 1-24

Attribute Name: l3-banks

Attribute Type: uint8

Attribute Range: 1-23

Attribute Name: vlan-xlate-banks

Attribute Type: uint8

Attribute Range: 1-23

### Netconf edit-config payload

```
<profiles xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <forwarding-profiles>
    <custom-profile>
      <config>
        <l2-banks>1</l2-banks> <!-- operation="delete"-->
        <l3-banks>1</l3-banks> <!-- operation="delete"-->
        <vlan-xlate-banks>1</vlan-xlate-banks> <!-- operation="delete"-->
        <ep-vlan-xlate-banks>1</ep-vlan-xlate-banks> <!-- operation="delete"-->
      </config>
    </custom-profile>
  </forwarding-profiles>
</profiles>
```

### Command Syntax

```
forwarding custom-profile { l2-banks <1-24>| l3-banks <1-23>| vlan-xlate-banks <1-
23>| ep-vlan-xlate-banks <1-23> }
```

---

## Configure outer l3 header

Used to set Load balance tunneled packets based on outer header

This command is supported when following feature are enabled L3 feature and following feature are disabled dune feature,marvell feature

Attribute Name: outer-l3-header

Attribute Type: empty

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <tunnel>
      <config>
        </outer-l3-header><!-- operation="delete"-->
      </config>
    </tunnel>
  </load-balance>
</hardware>
```

### Command Syntax

```
load-balance rtag7 tunnel outer-l3-header
```

---

## Configure dest mac based

VXLAN Destination MAC address based load balancing

This command is supported when following feature are enabled vxlan feature and following feature are disabled dune feature,marvell feature

Attribute Name: dest-mac-based

Attribute Type: empty

Attribute Name: src-mac-based

Attribute Type: empty

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <vxlan>
      <inner-l2>
        <config>
          </src-mac-based><!-- operation="delete"-->
          </dest-mac-based><!-- operation="delete"-->
        </config>
      </inner-l2>
    </vxlan>
  </load-balance>
</hardware>
```

### Command Syntax

```
load-balance rtag7 vxlan inner-l2 { dest-mac | src-mac }
```

---

## Configure src ip based

VXLAN Source IP

This command is supported when following feature are enabled vxlan feature and following feature are disabled dune feature,marvell feature

Attribute Name: src-ip-based

Attribute Type: empty

Attribute Name: dest-ip-based

Attribute Type: empty

Attribute Name: src-l4-port-based

Attribute Type: empty

Attribute Name: dest-l4-port-based

Attribute Type: empty

Attribute Name: protocol-id-based

Attribute Type: empty

**Netconf edit-config payload**

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <vxlan>
      <inner-l3>
        <config>
          </dest-ip-based><!-- operation="delete"-->
          </src-l4-port-based><!-- operation="delete"-->
          </dest-l4-port-based><!-- operation="delete"-->
          </protocol-id-based><!-- operation="delete"-->
          </src-ip-based><!-- operation="delete"-->
        </config>
      </inner-l3>
    </vxlan>
  </load-balance>
</hardware>
```

**Command Syntax**

```
load-balance rtag7 vxlan inner-l3 { src-ip| dest-ip| srcl4-port| destl4-port|
  protocol-id }
```

**Configure src mac based**

mpls destination Mac address based load balancing

This command is supported when following feature are disabled dune feature,marvell feature

Attribute Name: dest-mac-based

Attribute Type: empty

Attribute Name: src-mac-based

Attribute Type: empty

Attribute Name: ether-type-based

Attribute Type: empty

Attribute Name: vlan-based

Attribute Type: empty

**Netconf edit-config payload**

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <mpls-ler>
      <inner-l2>
        <config>
          </src-mac-based><!-- operation="delete"-->
          </ether-type-based><!-- operation="delete"-->
          </vlan-based><!-- operation="delete"-->
          </dest-mac-based><!-- operation="delete"-->
        </config>
      </inner-l2>
```

```

</mpls-ler>
</load-balance>
</hardware>

```

## Command Syntax

```
load-balance rtag7 mpls-ler inner-l2 { dest-mac| src-mac| ether-type| vlan }
```

---

## Configure src ip address based

Source IP

This command is supported when following feature are disabled dune feature,marvell feature

Attribute Name: src-ip-address-based

Attribute Type: empty

Attribute Name: dest-ip-address-based

Attribute Type: empty

Attribute Name: src-l4-port-based

Attribute Type: empty

Attribute Name: dest-l4-port-based

Attribute Type: empty

Attribute Name: protocol-id-based

Attribute Type: empty

## Netconf edit-config payload

```

<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <mpls-ler>
      <inner-l3>
        <config>
          </dest-ip-address-based><!-- operation="delete"-->
          </src-l4-port-based><!-- operation="delete"-->
          </dest-l4-port-based><!-- operation="delete"-->
          </protocol-id-based><!-- operation="delete"-->
          </src-ip-address-based><!-- operation="delete"-->
        </config>
      </inner-l3>
    </mpls-ler>
  </load-balance>
</hardware>

```

## Command Syntax

```
load-balance rtag7 mpls-ler inner-l3 { src-ip| dest-ip| srcl4-port| destl4-port|
  protocol-id }
```

---

## Configure disable vxlan

This Object is to disable the control packets to CPU

This command is supported when following feature are enabled vxlan feature and following feature are disabled dune feature,marvell feature

Attribute Name: disable-vxlan

Attribute Type: empty

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <cpu-control>
    <packets>
      <config>
        </disable-vxlan><!-- operation="delete"-->
      </config>
    </packets>
  </cpu-control>
</hardware>
```

### Command Syntax

```
l3-protocols-cpu-disable vxlan
```

---

## Configure type

This Object is used to set LACP port-channel load-balancing and set port selection criteria (PSC) on an interface

This command is supported when following feature are enabled lacp feature and following feature are disabled dune feature,marvell feature

Attribute Name: type

Attribute Type: enum (dst-mac|src-mac|src-dst-mac|src-ip|dst-ip|src-dst-ip|rtag7)

### Netconf edit-config payload

```
<hardware xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <load-balance>
    <port-channel>
      <interfaces>
        <interface>
          <name>WORD</name>
          <config>
            <name>WORD</name>
            </config>
            <type>dst-mac</type> <!-- operation="delete"-->
          </interface>
        </interfaces>
      </port-channel>
    </load-balance>
  </hardware>
```



**Command Syntax**

```
port-channel load-balance (dst-mac|src-mac|src-dst-mac|src-ip|dst-ip|src-dst-
ip|rtag7)
```

---

**IPI-PLATFORM-CMIS**

---

**Configure fp port**

Front port panel number

Attribute Name: fp-port

Attribute Type: uint8

**Netconf edit-config payload**

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd> <!-- operation="delete"-->
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</qsfp-dd>
</qsfp-dds>
```

**Command Syntax**

```
qsfp-dd <0-255>
```

---

**Configure application**

Application configuration

Attribute Name: application

Attribute Type: uint8

Attribute Range: 2-15

**Netconf edit-config payload**

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
  <application>2</application> <!-- operation="delete"-->
</qsfp-dd>
</qsfp-dds>
```

**Command Syntax**

```
application <2-15>
```

---

## Configure service disable

To disable the service for a particular port

Attribute Name: service-disable

Attribute Type: empty

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </service-disable><!-- operation="delete"-->
</qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
service-disable
```

---

## Configure custom app host id

Configuration of custom application host ID

Attribute Name: custom-app-host-id

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
    <custom-app-host-id>1</custom-app-host-id> <!-- operation="delete"-->
  </qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
custom-app-host-id <1-32>
```

---

## Configure custom app media id

Configuration of custom application media ID

Attribute Name: custom-app-media-id

Attribute Type: uint8

Attribute Range: 1-32

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
  <custom-app-media-id>1</custom-app-media-id> <!-- operation="delete"-->
</qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
custom-app-media-id <1-32>
```

---

## Configure type

PRBS pattern type for generator/checker

Attribute Name: type

Attribute Type: enum (31q|31|23q|23|15q|15|13q|13|9q|9|7q|7|ssprq)

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
<host>
<prbs>
<generator>
<config>
  <type>31q</type> <!-- operation="delete"-->
</config>
</generator>
</prbs>
</host>
</qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
prbs generator type (31q|31|23q|23|15q|15|13q|13|9q|9|7q|7|ssprq) host
```

---

## Configure location

PRBS pattern generator/checker location

Attribute Name: location

Attribute Type: enum (pre-fec|post-fec)

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
prbs generator (pre-fec|post-fec) host
```

---

## Configure lane number

Host lane number

Attribute Name: lane-number

Attribute Type: uint8

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
</qsfp-dds>
```

---

## Command Syntax

host-lane <1-32>

---

## Configure id

Threshold ID

Attribute Name: id

Attribute Type: enum (tx-fdd|tx-fed)

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
  <host>
    <lanes>
      <lane>
        <lane-number>1</lane-number>
        <config>
          <lane-number>1</lane-number>
        </config>
        <thresholds>
          <threshold> <!-- operation="delete"-->
            <id>tx-fdd</id>
            <config>
              <id>tx-fdd</id>
            </config>
          </threshold>
        </thresholds>
      </lane>
    </lanes>
  </host>
</qsfp-dds>
```

## Command Syntax

threshold (tx-fdd|tx-fed)

---

## Configure high alarm

High alarm threshold

Attribute Name: high-alarm

Attribute Type: decimal64

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
```

```

<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</host>
</lanes>
</lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <thresholds>
    <threshold>
      <id>tx-fdd</id>
      <config>
        <id>tx-fdd</id>
      </config>
      <high-alarm>VALUE</high-alarm> <!-- operation="delete"-->
    </threshold>
  </thresholds>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

ha VALUE

---

## Configure low alarm

Low alarm threshold

Attribute Name: low-alarm

Attribute Type: decimal64

### Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </host>
  </lanes>
  </lane>
    <lane-number>1</lane-number>
    <config>
      <lane-number>1</lane-number>
    </config>
  </lane>
</qsfp-dd>
</qsfp-dds>

```

```

</config>
<thresholds>
<threshold>
  <id>tx-fdd</id>
  <config>
    <id>tx-fdd</id>
  </config>
  <low-alarm>VALUE</low-alarm> <!-- operation="delete"-->
</threshold>
</thresholds>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

la VALUE

---

## Configure high warning

High warn threshold

Attribute Name: high-warning

Attribute Type: decimal64

## Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</qsfp-dd>
<host>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <thresholds>
  <threshold>
    <id>tx-fdd</id>
    <config>
      <id>tx-fdd</id>
    </config>
    <high-warning>VALUE</high-warning> <!-- operation="delete"-->
  </threshold>
</thresholds>
</lane>

```

```

</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

hw VALUE

---

## Configure low warning

Low warn threshold

Attribute Name: low-warning

Attribute Type: decimal64

### Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
</qsfp-dds>
<host>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <thresholds>
  <threshold>
    <id>tx-fdd</id>
    <config>
      <id>tx-fdd</id>
    </config>
    <low-warning>VALUE</low-warning> <!-- operation="delete"-->
  </threshold>
</thresholds>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

lw VALUE

---

## Configure tx input equalizer target

Tx input equalizer target value code



Attribute Name: tx-input-equalizer-target

Attribute Type: uint8

Attribute Range: 1-15

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
  <host>
    <lanes>
      <lane>
        <lane-number>1</lane-number>
        <config>
          <lane-number>1</lane-number>
        </config>
        <signal-integrity>
          <config>
            <tx-input-equalizer-target>1</tx-input-equalizer-target> <!--
operation="delete"-->
          </config>
        </signal-integrity>
      </lane>
    </lanes>
  </host>
</qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
tx-input eq-target <1-15>
```

---

## Configure rx output equalizer pre cursor target

Rx output equalizer pre-cursor target value code

Attribute Name: rx-output-equalizer-pre-cursor-target

Attribute Type: uint8

Attribute Range: 1-15

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
</qsfp-dds>
```

```

<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <signal-integrity>
    <config>
      <rx-output-equalizer-pre-cursor-target>1</rx-output-equalizer-pre-cursor-
target> <!-- operation="delete"-->
    </config>
  </signal-integrity>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

```
rx-output eq-pre-cursor-target <1-15>
```

---

## Configure rx output equalizer post cursor target

Rx output equalizer post-cursor target value code

Attribute Name: rx-output-equalizer-post-cursor-target

Attribute Type: uint8

Attribute Range: 1-15

## Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</qsfp-dd>
</qsfp-dds>
<host>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <signal-integrity>
    <config>
      <rx-output-equalizer-post-cursor-target>1</rx-output-equalizer-post-
cursor-target> <!-- operation="delete"-->
    </config>
  </signal-integrity>
</lane>
</lanes>
</host>

```

```

</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

```
rx-output eq-post-cursor-target <1-15>
```

---

## Configure rx output amplitude target

Rx output equalizer amplitude target value code

Attribute Name: rx-output-amplitude-target

Attribute Type: uint8

Attribute Range: 0-15

## Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  </qsfp-dd>
</qsfp-dds>
<host>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <signal-integrity>
    <config>
      <rx-output-amplitude-target>0</rx-output-amplitude-target> <!--
operation="delete"-->
    </config>
  </signal-integrity>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

```
rx-output amp-target <0-15>
```

---

## Configure tx cdr bypass

Bypass the TX CDR control

Attribute Name: tx-cdr-bypass

Attribute Type: empty

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</host>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <signal-integrity>
  <config>
    </tx-cdr-bypass><!-- operation="delete"-->
  </config>
</signal-integrity>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
tx cdr-bypass
```

---

## Configure rx cdr bypass

Bypass the CDR control

Attribute Name: rx-cdr-bypass

Attribute Type: empty

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</host>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
```

```

    </config>
    <signal-integrity>
    <config>
        </rx-cdr-bypass><!-- operation="delete"-->
    </config>
</signal-integrity>
</lane>
</lanes>
</host>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

```
rx cdr-bypass
```

---

## Configure channel

Channel number

Attribute Name: channel

Attribute Type: int16

## Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
    <fp-port>0</fp-port>
    <config>
        <fp-port>0</fp-port>
    </config>
</media>
</lanes>
</lane>
    <lane-number>1</lane-number>
    <config>
        <lane-number>1</lane-number>
    </config>
    <laser>
    <config>
        <channel>0</channel>
    </config>
</laser>
</lane>
</lanes>
</media>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

```
laser channel <-32768-32767>
```

---

## Configure grid

Grid spacing

Attribute Name: grid

Attribute Type: enum (3p125|6p25|12p5|25|33|50|75|100)

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  <media>
    <lanes>
      <lane>
        <lane-number>1</lane-number>
        <config>
          <lane-number>1</lane-number>
        </config>
        <laser>
          <config>
            <grid>3p125</grid> <!-- operation="delete"-->
          </config>
        </laser>
      </lane>
    </lanes>
  </media>
</qsfp-dd>
</qsfp-dds>
```

### Command Syntax

```
laser grid (3p125|6p25|12p5|25|33|50|75|100)
```

---

## Configure fine tune freq

Fine tune frequency offset

Attribute Name: fine-tune-freq

Attribute Type: decimal64

### Netconf edit-config payload

```
<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <qsfp-dd>
    <fp-port>0</fp-port>
    <config>
      <fp-port>0</fp-port>
    </config>
  <media>
```

```

<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <laser>
    <config>
      <fine-tune-freq>VALUE</fine-tune-freq> <!-- operation="delete"-->
    </config>
  </laser>
</lane>
</lanes>
</media>
</qsfp-dd>
</qsfp-dds>

```

## Command Syntax

```
laser fine-tune-freq VALUE
```

---

## Configure output power

Targeted output power

Attribute Name: output-power

Attribute Type: decimal64

## Netconf edit-config payload

```

<qsfp-dds xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
<qsfp-dd>
  <fp-port>0</fp-port>
  <config>
    <fp-port>0</fp-port>
  </config>
</media>
<lanes>
<lane>
  <lane-number>1</lane-number>
  <config>
    <lane-number>1</lane-number>
  </config>
  <laser>
    <config>
      <output-power>VALUE</output-power> <!-- operation="delete"-->
    </config>
  </laser>
</lane>
</lanes>
</media>
</qsfp-dd>

```

---

```
</qsfp-dds>
```

## Command Syntax

```
laser output-power VALUE
```

---

## tibit-olt-microplug set interface IFNAME management-vlan-tpid (0x8100|0x88a8)

Attribute Name: interface-name

Attribute Type: string

Attribute Name: vlan-tpid

Attribute Type: string

### Netconf RPC payload

```
<ipi-platform-transceiver-tibit_tibit-olt-microplug-set-management-vlan-tpid
xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interface-name>IFNAME</interface-name>
  <vlan-tpid>0x8100</vlan-tpid>
</ipi-platform-transceiver-tibit_tibit-olt-microplug-set-management-vlan-tpid>
```

## Command Syntax

```
tibit-olt-microplug set interface IFNAME management-vlan-tpid (0x8100|0x88a8)
```

---

## tibit-olt-microplug set interface IFNAME management-vlan-id <1-4094>

Attribute Name: interface-name

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

### Netconf RPC payload

```
<ipi-platform-transceiver-tibit_tibit-olt-microplug-set-management-vlan-id
xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interface-name>IFNAME</interface-name>
  <vlan-id>1</vlan-id>
</ipi-platform-transceiver-tibit_tibit-olt-microplug-set-management-vlan-id>
```

## Command Syntax

```
tibit-olt-microplug set interface IFNAME management-vlan-id <1-4094>
```

---

## tibit-olt-microplug set interface IFNAME ethernet-mac-address XX:XX:XX:XX:XX:XX

Attribute Name: interface-name

Attribute Type: string



Attribute Name: mac-address

Attribute Type: yang:mac-address

### Netconf RPC payload

```
<ipi-platform-transceiver-tibit_tibit-olt-microplug-set-ethernet-mac-address
xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interface-name>IFNAME</interface-name>
  <mac-address>XX:XX:XX:XX:XX:XX</mac-address>
</ipi-platform-transceiver-tibit_tibit-olt-microplug-set-ethernet-mac-address>
```

### Command Syntax

```
tibit-olt-microplug set interface IFNAME ethernet-mac-address XX:XX:XX:XX:XX:XX
```

---

## tibit-olt-microplug set interface IFNAME next-active-firmware-bank-id <0-3>

Attribute Name: interface-name

Attribute Type: string

Attribute Name: bank-id

Attribute Type: uint8

Attribute Range: 0-3

### Netconf RPC payload

```
<ipi-platform-transceiver-tibit_tibit-olt-microplug-set-next-active-firmware-
bank xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interface-name>IFNAME</interface-name>
  <bank-id>0</bank-id>
</ipi-platform-transceiver-tibit_tibit-olt-microplug-set-next-active-firmware-
bank>
```

### Command Syntax

```
tibit-olt-microplug set interface IFNAME next-active-firmware-bank-id <0-3>
```

---

## tibit-olt-microplug reboot interface IFNAME

Attribute Name: interface-name

Attribute Type: string

### Netconf RPC payload

```
<ipi-platform-transceiver-tibit_tibit-olt-microplug-reboot xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-platform">
  <interface-name>IFNAME</interface-name>
</ipi-platform-transceiver-tibit_tibit-olt-microplug-reboot>
```

### Command Syntax

```
tibit-olt-microplug reboot interface IFNAME
```

---

## IPI-PLATFORM-TRANSCEIVER-SMART-SFP

---

### Configure xcvr loopback remote

Use this attribute to set TX/RX loopback for remote

Attribute Name: xcvr-loopback-remote

Attribute Type: enum (in|out)

#### Netconf edit-config payload

```
<smart-sfp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform-transceiver-smart-sfp">
  <interfaces>
    <interface>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>WORD</interface-name>
      </config>
      <xcvr-loopback-remote>in</xcvr-loopback-remote> <!-- operation="delete"-->
    </interface>
  </interfaces>
</smart-sfp>
```

#### Command Syntax

```
xcvr loopback (in|out) remote
```

---

### xcvr IFNAME tx-disable <1-256> remote

Attribute Name: if-name

Attribute Type: string

Attribute Name: xcvr-tx-disable-duration

Attribute Type: uint16

Attribute Range: 1-256

#### Netconf RPC payload

```
<smart-sfp-xcvr-txdisable-duration xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-platform-transceiver-smart-sfp">
  <if-name>IFNAME</if-name>
  <xcvr-tx-disable-duration>1</xcvr-tx-disable-duration>
</smart-sfp-xcvr-txdisable-duration>
```

#### Command Syntax

```
xcvr IFNAME tx-disable <1-256> remote
```

---

## xcvr IFNAME reset remote

Attribute Name: if-name

Attribute Type: string

### Netconf RPC payload

```
<smart-sfp-xcvr-reset-remote xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-  
platform-transceiver-smart-sfp">  
  <if-name>IFNAME</if-name>  
</smart-sfp-xcvr-reset-remote>
```

### Command Syntax

```
xcvr IFNAME reset remote
```

---

## IPI-AUTHENTICATION

---

### Configure mac authentication

Use this attribute to enable MAC authentication globally. If MAC authentication is not enabled, other MAC authentication related commands throw an error when issued.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: mac-authentication

Attribute Type: empty

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">  
  <global>  
    <config>  
      </mac-authentication><!-- operation="delete"-->  
    </config>  
  </global>  
</authentication>
```

### Command Syntax

```
auth-mac system-auth-ctrl
```

---

### Configure dot1x authentication

Use this attribute to enable globally authentication.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: dot1x-authentication

Attribute Type: empty

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
```

```

<global>
<config>
  </dot1x-authentication><!-- operation="delete"-->
</config>
</global>
</authentication>

```

## Command Syntax

```
dot1x system-auth-ctrl
```

---

## Configure dot1x control

Use this attribute to enable or disable the 802.1X authentication control on an interface.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: dot1x-control

Attribute Type: enum (force-unauthorized|force-authorized|auto)

## Netconf edit-config payload

```

<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
<dot1x-interfaces>
<dot1x-interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <dot1x-control>force-authorized</dot1x-control>
</dot1x-interface>
</dot1x-interfaces>
</authentication>

```

## Command Syntax

```
dot1x port-control (force-unauthorized|force-authorized|auto)
```

---

## Configure protocol version

Use this attribute to set the protocol version of dot1x to 1 or 2. The protocol version must be synchronized with the Xsupplicant being used in that interface.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: protocol-version

Attribute Type: enum (1|2)

## Netconf edit-config payload

```

<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
<dot1x-interfaces>
<dot1x-interface>
  <name>WORD</name>
  <config>

```

```

    <name>WORD</name>
  </config>
  <protocol-version>2</protocol-version> <!-- operation="delete"-->
</dot1x-interface>
</dot1x-interfaces>
</authentication>

```

## Command Syntax

```
dot1x protocol-version (1|2)
```

---

## Configure quiet period

Use this attribute to set the quiet-period time interval. When a switch cannot authenticate a client, the switch remains idle for a quiet-period interval of time, then tries again. By administratively changing the quiet-period interval, by entering a lower number than the default, a faster response time can be provided

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: quiet-period

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```

<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <dot1x-interfaces>
    <dot1x-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <authenticator-pae>
      <config>
        <quiet-period>1</quiet-period> <!-- operation="delete"-->
      </config>
    </authenticator-pae>
  </dot1x-interface>
</dot1x-interfaces>
</authentication>

```

## Command Syntax

```
dot1x quiet-period <1-65535>
```

---

## Configure max reauth value

Use this attribute to set the maximum reauthentication value, which sets the maximum number of reauthentication attempts after which the port will be unauthorized.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: max-reauth-value

Attribute Type: uint8

Attribute Range: 1-10

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <dot1x-interfaces>
    <dot1x-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <authenticator-pae>
      <config>
        <max-reauth-value>1</max-reauth-value> <!-- operation="delete"-->
      </config>
    </authenticator-pae>
  </dot1x-interface>
</dot1x-interfaces>
</authentication>
```

### Command Syntax

```
dot1x reauthMax <1-10>
```

---

## Configure interval period

Use this attribute to set the interval between successive attempts to request an ID.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: interval-period

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <dot1x-interfaces>
    <dot1x-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <authenticator-pae>
      <config>
        <interval-period>1</interval-period> <!-- operation="delete"-->
      </config>
    </authenticator-pae>
  </dot1x-interface>
</dot1x-interfaces>
</authentication>
```

## Command Syntax

```
dot1x timeout tx-period <1-65535>
```

---

## Configure reauthentication period

Use this attribute to set the interval between reauthorization attempts.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: reauthentication-period

Attribute Type: uint32

Attribute Range: 1-4294967295

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <dot1x-interfaces>
    <dot1x-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <reauthentication-timer>
        <config>
          <reauthentication-period>1</reauthentication-period> <!-- operation="delete"-
->
        </config>
      </reauthentication-timer>
    </dot1x-interface>
  </dot1x-interfaces>
</authentication>
```

## Command Syntax

```
dot1x timeout re-authperiod <1-4294967295>
```

---

## Configure enable reauthentication

Use this attribute to enable reauthentication on a port.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: enable-reauthentication

Attribute Type: empty

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <dot1x-interfaces>
    <dot1x-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
```

```

<reauthentication-timer>
<config>
    </enable-reauthentication><!-- operation="delete"-->
</config>
</reauthentication-timer>
</dot1x-interface>
</dot1x-interfaces>
</authentication>

```

## Command Syntax

```
dot1x reauthentication
```

---

## Configure enable mac auth bypass

Use this attribute to enable/disable mac-auth-bypass on a port.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: enable-mac-auth-bypass

Attribute Type: enum (enable|disable)

## Netconf edit-config payload

```

<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
<dot1x-interfaces>
<dot1x-interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
<reauthentication-timer>
<config>
    <enable-mac-auth-bypass>enable</enable-mac-auth-bypass> <!--
operation="delete"-->
</config>
</reauthentication-timer>
</dot1x-interface>
</dot1x-interfaces>
</authentication>

```

## Command Syntax

```
dot1x mac-auth-bypass (enable|disable)
```

---

## Configure supplicant timeout

Use this attribute to set the interval for a supplicant to respond.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: supplicant-timeout

Attribute Type: uint16

Attribute Range: 1-65535



**Netconf edit-config payload**

```

<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
<dot1x-interfaces>
<dot1x-interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<authenticator-be>
<config>
  <supplicant-timeout>1</supplicant-timeout> <!-- operation="delete"-->
</config>
</authenticator-be>
</dot1x-interface>
</dot1x-interfaces>
</authentication>

```

**Command Syntax**

```
dot1x timeout supp-timeout <1-65535>
```

---

**Configure server timeout**

Use this attribute to set the authentication server response timeout.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: server-timeout

Attribute Type: uint16

Attribute Range: 1-65535

**Netconf edit-config payload**

```

<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
<dot1x-interfaces>
<dot1x-interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<authenticator-be>
<config>
  <server-timeout>1</server-timeout> <!-- operation="delete"-->
</config>
</authenticator-be>
</dot1x-interface>
</dot1x-interfaces>
</authentication>

```

**Command Syntax**

```
dot1x timeout server-timeout <1-65535>
```

---

## Configure mac control

Use this attribute to enable or disable the MAC authentication control on an interface.

This command is supported when following feature are enabled MAC\_AUTH feature,HAVE\_AUTHD feature

Attribute Name: mac-control

Attribute Type: empty

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <mac-interfaces>
    <mac-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </mac-control>
  </mac-interface>
</mac-interfaces>
</authentication>
```

### Command Syntax

```
auth-mac
```

---

## Configure mac mode

Use this attribute to enable or disable the MAC authentication mode on an interface.

This command is supported when following feature are enabled MAC\_AUTH feature,HAVE\_AUTHD feature

Attribute Name: mac-mode

Attribute Type: enum (filter|shutdown)

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <mac-interfaces>
    <mac-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <mac-mode>shutdown</mac-mode> <!-- operation="delete"-->
    </mac-interface>
  </mac-interfaces>
</authentication>
```

### Command Syntax

```
auth-mac mode (filter|shutdown)
```

---

## Configure dynamic vlan creation

Use this attribute to enable or disable dynamic VLAN creation after successful MAC authentication.

This command is supported when following feature are enabled MAC\_AUTH feature,HAVE\_AUTHD feature

Attribute Name: dynamic-vlan-creation

Attribute Type: empty

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <mac-interfaces>
    <mac-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </dynamic-vlan-creation><!-- operation="delete"-->
    </mac-interface>
  </mac-interfaces>
</authentication>
```

### Command Syntax

```
auth-mac dynamic-vlan-creation
```

---

## Configure mac address aging

Use this attribute to either enable or disable MAC aging. When enabled, a MAC entry is added to the forwarding database, with aging time equal to the bridge aging time. Otherwise, the MAC entry will not be aged out. If MAC aging is disabled, the MAC entry will not be aged out

This command is supported when following feature are enabled MAC\_AUTH feature,HAVE\_AUTHD feature

Attribute Name: mac-address-aging

Attribute Type: empty

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <mac-interfaces>
    <mac-interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </mac-address-aging><!-- operation="delete"-->
    </mac-interface>
  </mac-interfaces>
</authentication>
```

### Command Syntax

```
auth-mac mac-aging
```

---

## Configure options

Use this attribute to turn on or turn off 802.1x debugging at various levels.

This command is supported when following feature are enabled HAVE\_AUTHD feature

Attribute Name: options

Attribute Type: bits (event|timer|packet|nsm|all)

### Netconf edit-config payload

```
<authentication xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <debug>
    <config>
      <options>event</options> <!-- operation="delete"-->
    </config>
  </debug>
</authentication>
```

### Command Syntax

```
debug dot1x (event|timer|packet|nsm|all)
```

---

## dot1x initialize interface IFNAME

Attribute Name: name

Attribute Type: string

Attribute Range: 1-33

### Netconf RPC payload

```
<dot1x-authentication-initialize-interface xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-authentication">
  <name>IFNAME</name>
</dot1x-authentication-initialize-interface>
```

### Command Syntax

```
dot1x initialize interface IFNAME
```

---

## snmp restart auth

### Netconf RPC payload

```
<dot1x-authentication-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-authentication"/>
```

### Command Syntax

```
snmp restart auth
```

---

## debug dot1x (event|timer|packet|nsm|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|timer|packet|nsm|all)

### Netconf RPC payload

```
<dot1x-authentication-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <terminal-debug-options>event</terminal-debug-options>
</dot1x-authentication-terminal-debug-on>
```

### Command Syntax

```
debug dot1x (event|timer|packet|nsm|all)
```

---

## no debug dot1x (event|timer|packet|nsm|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|timer|packet|nsm|all)

### Netconf RPC payload

```
<dot1x-authentication-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication">
  <terminal-debug-options>event</terminal-debug-options>
</dot1x-authentication-terminal-debug-off>
```

### Command Syntax

```
no debug dot1x (event|timer|packet|nsm|all)
```

---

## IPI-AUTHENTICATION-RADIUS

---

### Configure port

Specify the radius client port number. The default port number is 1812.

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: port

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: source-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-authentication-radius">
  <global>
    <config>
      <source-address>A.B.C.D</source-address> <!-- operation="delete"-->
      <port>0</port> <!-- operation="delete"-->
    </config>
  </global>
</authentication-radius>
```

```
</global>
</authentication-radius>
```

## Command Syntax

```
ip radius source-interface A.B.C.D <0-65535>
```

---

## Configure timeout

Use this attribute to set the global timeout which is how long the device waits for a response from a RADIUS server before declaring a timeout failure.

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: timeout

Attribute Type: uint8

Attribute Range: 1-60

## Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <global>
    <config>
      <timeout>1</timeout> <!-- operation="delete"-->
    </config>
  </global>
</authentication-radius>
```

## Command Syntax

```
radius-server dot1x timeout <1-60>
```

---

## Configure retransmit max retries

Use this attribute to specify the number of times the router transmits each radius request to the server before giving up

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: retransmit-max-retries

Attribute Type: uint8

Attribute Range: 1-100

## Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <global>
    <config>
      <retransmit-max-retries>1</retransmit-max-retries> <!-- operation="delete"-->
    </config>
  </global>
</authentication-radius>
```

---

## Command Syntax

```
radius-server dot1x retransmit <1-100>
```

---

## Configure key string

Use this attribute to set a global preshared key (shared secret) which is a text string shared between the device and RADIUS servers

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: key-string

Attribute Type: string

Attribute Range: 1-64

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <global>
    <config>
      <key-string>WORD</key-string> <!-- operation="delete"-->
    </config>
  </global>
</authentication-radius>
```

## Command Syntax

```
radius-server dot1x key-string WORD
```

---

## Configure encryption key

Use this attribute to set a global preshared key (shared secret) which is a text string shared between the device and RADIUS servers

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: encryption-key

Attribute Type: string

Attribute Range: 18-130

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <global>
    <config>
      <encryption-key>WORD</encryption-key> <!-- operation="delete"-->
    </config>
  </global>
</authentication-radius>
```

## Command Syntax

```
radius-server dot1x key-string encrypted WORD
```

---

## Configure host address

The host-address to configure the radius host.

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: host-address

Attribute Type: inet:ipv4-address

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <hosts>
    <host> <!-- operation="delete"-->
      <host-address>A.B.C.D</host-address>
    <config>
      <host-address>A.B.C.D</host-address>
    </config>
  </host>
</hosts>
</authentication-radius>
```

### Command Syntax

```
radius-server dot1x host A.B.C.D
```

---

## Configure host port

Specify the radius client port number. The default port number is 1812.

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: host-port

Attribute Type: uint16

Attribute Range: 0-65535

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <hosts>
    <host>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
      </config>
      <host-port>0</host-port> <!-- operation="delete"-->
    </host>
  </hosts>
</authentication-radius>
```

### Command Syntax

```
auth-port <0-65535>
```



---

## Configure host timeout

Use this attribute to set the timeout which is how long the device waits for a response from a RADIUS server before declaring a timeout failure.

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: host-timeout

Attribute Type: uint8

Attribute Range: 0-60

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <hosts>
    <host>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
      </config>
      <host-timeout>0</host-timeout> <!-- operation="delete"-->
    </host>
  </hosts>
</authentication-radius>
```

### Command Syntax

```
timeout <0-60>
```

---

## Configure host retransmit max retries

Use this attribute to specify the number of times the router transmits each radius request to the server before giving up.

This command is supported when following feature are enabled OpenSSL crypto library available

Attribute Name: host-retransmit-max-retries

Attribute Type: uint8

Attribute Range: 0-100

### Netconf edit-config payload

```
<authentication-radius xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
authentication-radius">
  <hosts>
    <host>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
      </config>
      <host-retransmit-max-retries>0</host-retransmit-max-retries> <!--
operation="delete"-->
    </host>
  </hosts>
```

```
</authentication-radius>
```

## Command Syntax

```
retransmit <0-100>
```

---

# IPI-ACL

---

## Configure type

Type indicates the fields allowed in the ACL entries belonging to the ACL set (e.g., ip, ipv6, etc.)

Attribute Name: type

Attribute Type: enum (mac|ip|ipv6|arp)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set> <!-- operation="delete"-->
      <type>ip</type>
      <config>
        <type>ip</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
ip access-list NAME
```

---

## Configure name

Type indicates the fields allowed in the ACL entries belonging to the ACL set (e.g., ip, ipv6, etc.)

Attribute Name: type

Attribute Type: enum (mac|ip|ipv6|arp)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set> <!-- operation="delete"-->
      <type>ipv6</type>
      <config>
        <type>ipv6</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
</acl>
```

```

</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```
ipv6 access-list NAME
```

---

## Configure description

Description, or comment, for the ACL set

Attribute Name: description

Attribute Type: string

Attribute Range: 1-100

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
<acl-sets>
<acl-set>
  <type>mac</type>
  <config>
    <type>mac</type>
    <name>WORD</name>
  </config>
  <name>NAME</name>
  <description>LINE</description> <!-- operation="delete"-->
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```
remark LINE
```

---

## Configure ipv6 disable default icmpv6 rule

Use this attribute to inform that the default icmpv6 rule is disable for the IPv6 ACL.

Attribute Name: ipv6-disable-default-icmpv6-rule

Attribute Type: uint8

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
<acl-sets>
<acl-set>
  <type>mac</type>
  <config>
    <type>mac</type>
    <name>WORD</name>
  </config>

```

```

    <name>NAME</name>
    </ipv6-disable-default-icmpv6-rule><!-- operation="delete"-->
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```
no 268435453 permit icmpv6 any any
```

---

## Configure starting sequence number

Use this attribute to set starting sequence number for resequencing

Attribute Name: starting-sequence-number

Attribute Type: uint32

Attribute Range: 1-268435453

Attribute Name: increment-steps

Attribute Type: uint32

Attribute Range: 1-268435453

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    <re-sequence>
      <config>
        <increment-steps>1</increment-steps> <!-- operation="delete"-->
        <starting-sequence-number>1</starting-sequence-number> <!--
operation="delete"-->
      </config>
    </re-sequence>
  </acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```
resequence <1-268435453> <1-268435453>
```

---

## Configure forwarding action default

Use this attribute to set default forwarding action

Attribute Name: forwarding-action-default

Attribute Type: enum (deny-all|permit-all)

Attribute Name: monitor-action-default

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    <default-actions>
      <config>
        <monitor-action-default>log</monitor-action-default> <!-- operation="delete"-->
        <forwarding-action-default>deny-all</forwarding-action-default> <!--
operation="delete"-->
      </config>
    </default-actions>
  </acl-set>
</acl-sets>
</acl>
```

### Command Syntax

```
default (deny-all|permit-all) ((log|sample)|)
```

---

## Configure redirect interface name

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: union

Attribute Name: destination-address

Attribute Type: union

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) tcp (any|host A.B.C.D|A.B.C.D/M|A.B.C.D A.B.C.D)
  (any|host A.B.C.D|A.B.C.D/M|A.B.C.D A.B.C.D)
```

```
((ack|established|fin|psh|rst|syn|urg|)) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample|)) (redirect-to-port IFNAME|)
```

---

## Configure sequence id

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: union

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entry>
    <sequence-id>1</sequence-id>
```

```

<config>
  <sequence-id>1</sequence-id>
</config>
<ipv4>
<config>
  <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
  </protocol-tcp><!-- operation="delete"-->
  <source-address>any</source-address> <!-- operation="delete"-->
  <destination-address>any</destination-address> <!-- operation="delete"-->
  <dscp>default</dscp> <!-- operation="delete"-->
  <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
  <vlan-id>1</vlan-id> <!-- operation="delete"-->
  <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
  <monitor-action>log</monitor-action> <!-- operation="delete"-->
  <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
  </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7|<0-63>) ({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-
4094>|) (inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure forwarding action

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: precedence

Attribute Type: union



Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <precedence>routine</precedence> <!-- operation="delete"-->
          <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) tcp (any) (any) precedence
(routine|priority|immediate|flash|flashoverride|critical|internet|network|<0-7>)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)
```

---

## Configure protocol tcp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
<acl-sets>
<acl-set>
  <type>mac</type>
  <config>
    <type>mac</type>
    <name>WORD</name>
  </config>
```

```

    <name>NAME</name>
  <acl-entries>
  <acl-entry>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
      <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
      </protocol-tcp><!-- operation="delete"-->
      <source-address>any</source-address> <!-- operation="delete"-->
      <destination-address>any</destination-address> <!-- operation="delete"-->
      </fragments><!-- operation="delete"-->
      <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
      <vlan-id>1</vlan-id> <!-- operation="delete"-->
      <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
      <monitor-action>log</monitor-action> <!-- operation="delete"-->
      <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
  </ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) fragments
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure source address

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          </fragments><!-- operation="delete"-->
          <dscp>default</dscp> <!-- operation="delete"-->
          <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
```

```

    </config>
  </ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) fragments dscp
  (default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
  af43|cs5|ef|cs6|cs7) ({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|)
  (inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure destination address

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: precedence

Attribute Type: enum (routine|priority|immediate|flash|flashoverride|critical|internet|network)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
<acl-sets>
<acl-set>
  <type>mac</type>
  <config>
    <type>mac</type>
    <name>WORD</name>
  </config>
  <name>NAME</name>
</acl-sets>
<acl-entries>
<acl-entry>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
  </config>
  <ipv4>
  <config>
    <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
    </protocol-tcp><!-- operation="delete"-->
    <source-address>any</source-address> <!-- operation="delete"-->
    <destination-address>any</destination-address> <!-- operation="delete"-->
    </fragments><!-- operation="delete"-->
    <precedence>routine</precedence> <!-- operation="delete"-->
    <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
    <vlan-id>1</vlan-id> <!-- operation="delete"-->
    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
    <monitor-action>log</monitor-action> <!-- operation="delete"-->
    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
  </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) tcp (any) (any) fragments precedence
(routine|priority|immediate|flash|flashoverride|critical|internet|network)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

**Configure destination port operator**

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: union

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

```

        </protocol-tcp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
        <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls|<0-
65535>) ({ack|established|fin|psh|rst|syn|urg|}) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure tcp destination port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port



Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lldp|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: dscp

Attribute Type: enum  
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
          <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
          <dscp>default</dscp> <!-- operation="delete"-->
          <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

```

        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls) dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) ({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure precedence

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-  
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|p  
im-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: precedence

Attribute Type: enum (routine|priority|immediate|flash|flashoverride|critical|internet|network)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv4>
          <config>
            <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
            </protocol-tcp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!-- operation="delete"-->
            <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
            <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
            <precedence>routine</precedence> <!-- operation="delete"-->
            <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
          </config>
        </ipv4>
      </acl-entry>
    </acl-entries>
  </acl-set>
```

```
</acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) tcp (any) (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
precedence
(routine|priority|immediate|flash|flashoverride|critical|internet|network)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)
```

---

## Configure lower destination port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <lower-destination-port-in-range>0</lower-destination-port-in-range> <!--
operation="delete"-->
          <upper-destination-port-in-range>0</upper-destination-port-in-range> <!--
operation="delete"-->
          <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>
```

### Command Syntax

```
(<1-268435453>|) (deny|permit) tcp (any) (any) range <0-65535> <0-65535>
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)
```

---

## Configure upper destination port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
    </acl-set>
  </acl-sets>
</acl>
```

```

        <type>mac</type>
        <name>WORD</name>
    </config>
    <name>NAME</name>
<acl-entries>
<acl-entry>
    <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
        <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </protocol-tcp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <lower-destination-port-in-range>0</lower-destination-port-in-range> <!--
operation="delete"-->
        <upper-destination-port-in-range>0</upper-destination-port-in-range> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) range <0-65535> <0-65535> dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) ({ack|established|fin|psh|rst|syn|urg|}) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure tcp flags

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: precedence

Attribute Type: enum (routine|priority|immediate|flash|flashoverride|critical|internet|network)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
```



```

        <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </protocol-tcp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <lower-destination-port-in-range>0</lower-destination-port-in-range> <!--
operation="delete"-->
        <upper-destination-port-in-range>0</upper-destination-port-in-range> <!--
operation="delete"-->
        <precedence>routine</precedence> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) range <0-65535> <0-65535> precedence
(routine|priority|immediate|flash|flashoverride|critical|internet|network)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure source port operator

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: union

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <source-port-operator>eq</source-port-operator> <!-- operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

```

        <destination-address>any</destination-address> <!-- operation="delete"-->
        <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
        <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls|<0-
65535>) (any) (eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls) dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) ({ack|established|fin|psh|rst|syn|urg|}) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample|)) (redirect-to-port IFNAME|)

```

## Configure tcp source port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lldp|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lldp|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

```

>         <source-port-operator>eq</source-port-operator> <!-- operation="delete"-->
</source-port-operator>
        <tcp-source-port>echo</tcp-source-port> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
        <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) (eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure vlan id

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lldp|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lldp|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: precedence

Attribute Type: enum (routine|priority|immediate|flash|flashoverride|critical|internet|network)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
```

```

        <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </protocol-tcp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <source-port-operator>eq</source-port-operator> <!-- operation="delete"--
>
        <tcp-source-port>echo</tcp-source-port> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
        <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
        <precedence>routine</precedence> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) (eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
precedence
(routine|priority|immediate|flash|flashoverride|critical|internet|network)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure inner vlan id

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### **Netconf edit-config payload**

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
```



```

<config>
  <sequence-id>1</sequence-id>
</config>
<ipv4>
<config>
  <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
  </protocol-tcp><!-- operation="delete"-->
  <source-address>any</source-address> <!-- operation="delete"-->
  <source-port-operator>eq</source-port-operator> <!-- operation="delete"-->
>
  <tcp-source-port>echo</tcp-source-port> <!-- operation="delete"-->
  <destination-address>any</destination-address> <!-- operation="delete"-->
  <lower-destination-port-in-range>0</lower-destination-port-in-range> <!--
operation="delete"-->
  <upper-destination-port-in-range>0</upper-destination-port-in-range> <!--
operation="delete"-->
  <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
  <vlan-id>1</vlan-id> <!-- operation="delete"-->
  <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
  <monitor-action>log</monitor-action> <!-- operation="delete"-->
  <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
  </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) range <0-65535> <0-65535> ({ack|established|fin|psh|rst|syn|urg}|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure dscp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
```

```

    <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
        <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </protocol-tcp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <source-port-operator>eq</source-port-operator> <!-- operation="delete"--
>
        <tcp-source-port>echo</tcp-source-port> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <lower-destination-port-in-range>0</lower-destination-port-in-range> <!--
operation="delete"-->
        <upper-destination-port-in-range>0</upper-destination-port-in-range> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) range <0-65535> <0-65535> dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) ({ack|established|fin|psh|rst|syn|urg|}) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample|)) (redirect-to-port IFNAME|)

```

## Configure monitor action

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: precedence

Attribute Type: enum (routine|priority|immediate|flash|flashoverride|critical|internet|network)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
    </acl-set>
  </acl-sets>
</acl>
```

```

    <name>NAME</name>
  <acl-entries>
  <acl-entry>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
      <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
      </protocol-tcp><!-- operation="delete"-->
      <source-address>any</source-address> <!-- operation="delete"-->
      <source-port-operator>eq</source-port-operator> <!-- operation="delete"-->
    >
      <tcp-source-port>echo</tcp-source-port> <!-- operation="delete"-->
      <destination-address>any</destination-address> <!-- operation="delete"-->
      <lower-destination-port-in-range>0</lower-destination-port-in-range> <!--
operation="delete"-->
      <upper-destination-port-in-range>0</upper-destination-port-in-range> <!--
operation="delete"-->
      <precedence>routine</precedence> <!-- operation="delete"-->
      <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
      <vlan-id>1</vlan-id> <!-- operation="delete"-->
      <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
      <monitor-action>log</monitor-action> <!-- operation="delete"-->
      <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
  </ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) range <0-65535> <0-65535> precedence
(routine|priority|immediate|flash|flashoverride|critical|internet|network)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure lower source port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
    </acl-set>
  </acl-sets>
</acl>
```

```

    <name>NAME</name>
  <acl-entries>
  <acl-entry>
    <sequence-id>1</sequence-id>
    <config>
      <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
      <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
      </protocol-tcp><!-- operation="delete"-->
      <source-address>any</source-address> <!-- operation="delete"-->
      <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
      <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
      <destination-address>any</destination-address> <!-- operation="delete"-->
      <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
      <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
      <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
      <vlan-id>1</vlan-id> <!-- operation="delete"-->
      <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
      <monitor-action>log</monitor-action> <!-- operation="delete"-->
      <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
  </ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) range <0-65535> <0-65535> (any)
(eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure upper source port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
```



```

        <name>WORD</name>
    </config>
    <name>NAME</name>
<acl-entries>
<acl-entry>
    <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
        <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </protocol-tcp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
        <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
        <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) range <0-65535> <0-65535> (any)
(eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls) dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) ({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure protocol udp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-udp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

```

        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (any) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure fragments

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
  <acl-set>

```

```

    <type>mac</type>
  <config>
    <type>mac</type>
    <name>WORD</name>
  </config>
  <name>NAME</name>
<acl-entries>
<acl-entry>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
  </config>
  <ipv4>
  <config>
    <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
    </protocol-udp><!-- operation="delete"-->
    <source-address>any</source-address> <!-- operation="delete"-->
    <destination-address>any</destination-address> <!-- operation="delete"-->
    </fragments><!-- operation="delete"-->
    <vlan-id>1</vlan-id> <!-- operation="delete"-->
    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
    <monitor-action>log</monitor-action> <!-- operation="delete"-->
    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
  </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (any) fragments (vlan <1-4094>|) (inner-
vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure udp destination port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-destination-port

Attribute Type: union

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-udp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
          <udp-destination-port>echo</udp-destination-port> <!--
operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
```

```

    </config>
  </ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp|<0-65535>) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure udp source port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-source-port

Attribute Type: union

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-destination-port

Attribute Type: enum (echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbios-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
          </config>
          <ipv4>
            <config>
              <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
              </protocol-udp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <source-port-operator>eq</source-port-operator> <!-- operation="delete"-->
            </config>
            <udp-source-port>echo</udp-source-port> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!-- operation="delete"-->
            <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
            <udp-destination-port>echo</udp-destination-port> <!--
operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
          </config>
        </ipv4>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>
```

### Command Syntax

```
(<1-268435453>|) (deny|permit) udp (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
```

```
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp|<0-65535>) (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp) (vlan <1-4094>|) (inner-vlan
<1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)
```

## Configure protocol icmp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-message

Attribute Type: enum (administratively-prohibited|alternate-address|conversion-error|dod-host-prohibited|dod-net-prohibited|echo|echo-reply|general-parameter-problem|host-isolated|host-precedence-unreachable|host-redirect|host-tos-redirect|host-tos-unreachable|host-unknown|host-unreachable|information-reply|information-request|mask-reply|mask-request|mobile-redirect|net-redirect|net-tos-redirect|net-tos-unreachable|net-unreachable|network-unknown|no-room-for-option|option-missing|packet-too-big|parameter-problem|port-unreachable|precedence-unreachable|protocol-unreachable|reassembly-timeout|redirect|router-advertisement|router-solicitation|source-quench|source-route-failed|time-exceeded|timestamp-reply|timestamp-request|traceroute|ttl-exceeded|unreachable)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
```



```

<acl-set>
  <type>mac</type>
  <config>
    <type>mac</type>
    <name>WORD</name>
  </config>
  <name>NAME</name>
<acl-entries>
<acl-entry>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
  </config>
  <ipv4>
  <config>
    <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
    </protocol-icmp><!-- operation="delete"-->
    <source-address>any</source-address> <!-- operation="delete"-->
    <destination-address>any</destination-address> <!-- operation="delete"-->
    <icmp-message>administratively-prohibited</icmp-message> <!--
operation="delete"-->
    </fragments><!-- operation="delete"-->
    <vlan-id>1</vlan-id> <!-- operation="delete"-->
    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
    <monitor-action>log</monitor-action> <!-- operation="delete"-->
    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
  </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmp (any) (any) ((administratively-
prohibited|alternate-address|conversion-error|dod-host-prohibited|dod-net-
prohibited|echo|echo-reply|general-parameter-problem|host-isolated|host-
precedence-unreachable|host-redirect|host-tos-redirect|host-tos-
unreachable|host-unknown|host-unreachable|information-reply|information-
request|mask-reply|mask-request|mobile-redirect|net-redirect|net-tos-
redirect|net-tos-unreachable|net-unreachable|network-unknown|no-room-for-
option|option-missing|packet-too-big|parameter-problem|port-
unreachable|precedence-unreachable|protocol-unreachable|reassemble-
timeout|redirect|router-advertisement|router-solicitation|source-quench|source-
route-failed|time-exceeded|timestamp-reply|timestamp-request|traceroute|ttl-
exceeded|unreachable)|) fragments (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure icmp message

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-message

Attribute Type: enum (administratively-prohibited|alternate-address|conversion-error|dod-host-prohibited|dod-net-prohibited|echo|echo-reply|general-parameter-problem|host-isolated|host-precedence-unreachable|host-redirect|host-tos-redirect|host-tos-unreachable|host-unknown|host-unreachable|information-reply|information-request|mask-reply|mask-request|mobile-redirect|net-redirect|net-tos-redirect|net-tos-unreachable|net-unreachable|network-unknown|no-room-for-option|option-missing|packet-too-big|parameter-problem|port-unreachable|precedence-unreachable|protocol-unreachable|reassembly-timeout|redirect|router-advertisement|router-solicitation|source-quench|source-route-failed|time-exceeded|timestamp-reply|timestamp-request|traceroute|ttl-exceeded|unreachable)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
    </acl-set>
  </acl-sets>
</acl>
```

```

        <type>mac</type>
        <name>WORD</name>
    </config>
    <name>NAME</name>
<acl-entries>
<acl-entry>
    <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
    </config>
    <ipv4>
    <config>
        <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
        </protocol-icmp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!-- operation="delete"-->
        <icmp-message>administratively-prohibited</icmp-message> <!--
operation="delete"-->
        </fragments><!-- operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmp (any) (any) ((administratively-
prohibited|alternate-address|conversion-error|dod-host-prohibited|dod-net-
prohibited|echo|echo-reply|general-parameter-problem|host-isolated|host-
precedence-unreachable|host-redirect|host-tos-redirect|host-tos-
unreachable|host-unknown|host-unreachable|information-reply|information-
request|mask-reply|mask-request|mobile-redirect|net-redirect|net-tos-
redirect|net-tos-unreachable|net-unreachable|network-unknown|no-room-for-
option|option-missing|packet-too-big|parameter-problem|port-
unreachable|precedence-unreachable|protocol-unreachable|reassembly-
timeout|redirect|router-advertisement|router-solicitation|source-quench|source-
route-failed|time-exceeded|timestamp-reply|timestamp-request|traceroute|ttl-
exceeded|unreachable)|) fragments dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) (vlan <1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)
(redirect-to-port IFNAME|)

```

---

## Configure icmp type

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-type

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: icmp-code

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: fragments

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
</acl>
```

```

<acl-entries>
<acl-entry>
  <sequence-id>1</sequence-id>
  <config>
    <sequence-id>1</sequence-id>
  </config>
  <ipv4>
    <config>
      <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
      </protocol-icmp><!-- operation="delete"-->
      <source-address>any</source-address> <!-- operation="delete"-->
      <destination-address>any</destination-address> <!-- operation="delete"-->
      <icmp-type>0</icmp-type> <!-- operation="delete"-->
      <icmp-code>0</icmp-code> <!-- operation="delete"-->
      </fragments><!-- operation="delete"-->
      <vlan-id>1</vlan-id> <!-- operation="delete"-->
      <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
      <monitor-action>log</monitor-action> <!-- operation="delete"-->
      <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
  </ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmp (any) (any) <0-255> <0-255> fragments (vlan <1-
4094>|) (inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure icmp code

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-type

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: icmp-code

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          </protocol-icmp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          <icmp-type>0</icmp-type> <!-- operation="delete"-->
          <icmp-code>0</icmp-code> <!-- operation="delete"-->
          </fragments><!-- operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

```

        <dscp>default</dscp> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv4>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmp (any) (any) <0-255> <0-255> fragments dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7) (vlan <1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)
(redirect-to-port IFNAME|)

```

---

## Configure protocol name

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-name

Attribute Type: union

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <config>
          <forwarding-action>deny</forwarding-action> <!-- operation="delete"-->
          <protocol-name>igmp</protocol-name> <!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!-- operation="delete"-->
          </fragments><!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit)
  (igmp|ipip|ipv6ip|rsvp|gre|esp|ahp|eigrp|ospf|pim|ipcomp|vrrp|any|<0-255>) (any)
  (any) fragments (vlan <1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)
  (redirect-to-port IFNAME|)

```

**Configure fragment monitor action**

Use this attribute to enable logging or sampling of the packets on which the match occurred (in-direction only).

This command is supported when following feature are enabled CUSTOM1 ACL feature

Attribute Name: fragment-monitor-action

Attribute Type: enum (log|sample)

Attribute Name: fragment-forwarding-action



Attribute Type: enum (deny-all|permit-all)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <type>mac</type>
      <config>
        <type>mac</type>
        <name>WORD</name>
      </config>
      <name>NAME</name>
    </acl-set>
  </acl-sets>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv4>
        <fragment-actions>
          <config>
            <fragment-forwarding-action>deny-all</fragment-forwarding-action> <!--
operation="delete"-->
            <fragment-monitor-action>log</fragment-monitor-action> <!--
operation="delete"-->
          </config>
        </fragment-actions>
      </ipv4>
    </acl-entry>
  </acl-entries>
</acl>
```

### Command Syntax

```
(<1-268435453>|) fragments (deny-all|permit-all) ((log|sample)|)
```

## IPI-ACL-IPV6

### Configure redirect interface name

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp  
 Attribute Type: empty  
 Attribute Name: source-address  
 Attribute Type: union  
 Attribute Name: destination-address  
 Attribute Type: union  
 Attribute Name: dscp  
 Attribute Type: union  
 Attribute Name: flow-label  
 Attribute Type: uint32  
 Attribute Range: 0-1048575  
 Attribute Name: tcp-flags  
 Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)  
 Attribute Name: vlan-id  
 Attribute Type: uint16  
 Attribute Range: 1-4094  
 Attribute Name: inner-vlan-id  
 Attribute Type: uint16  
 Attribute Range: 1-4094  
 Attribute Name: monitor-action  
 Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
```

```

        <source-address>any</source-address> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
    </ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any|X:X::X:X/M|X:X::X:X X:X::X:X)
  (any|X:X::X:X/M|X:X::X:X X:X::X:X) (dscp
  (default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
  af43|cs5|ef|cs6|cs7|<0-63>|) (flow-label <0-1048575>|)
  ({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
  ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure name

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: union

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-tcp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
            <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
            <dscp>default</dscp> <!-- operation="delete"-->
```

```

        <flow-label>0</flow-label> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls|<0-
65535>) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure type

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-tcp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <lower-destination-port-in-range>0</lower-destination-port-in-
range> <!-- operation="delete"-->
```

```

                                <upper-destination-port-in-range>0</upper-destination-port-in-
range> <!-- operation="delete"-->
                                <dscp>default</dscp> <!-- operation="delete"-->
                                <flow-label>0</flow-label> <!-- operation="delete"-->
                                <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
                                <vlan-id>1</vlan-id> <!-- operation="delete"-->
                                <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                                <monitor-action>log</monitor-action> <!-- operation="delete"-->
                                <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
                                </config>
                                </ipv6>
                                </acl-entry>
                                </acl-entries>
                                </acl-set>
                                </acl-sets>
                                </acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) range <0-65535> <0-65535> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure sequence id

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-tcp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              </fragments><!-- operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
              <flow-label>0</flow-label> <!-- operation="delete"-->
              <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
```



```

        </ipv6>
    </acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (any) fragments (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure forwarding action

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: union

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
            </config>
            <ipv6>
              <config>
                <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                </protocol-tcp><!-- operation="delete"-->
                <source-address>any</source-address> <!-- operation="delete"-->
                <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
                <tcp-source-port>echo</tcp-source-port> <!--
operation="delete"-->
                <destination-address>any</destination-address> <!--
operation="delete"-->
                <dscp>default</dscp> <!-- operation="delete"-->
                <flow-label>0</flow-label> <!-- operation="delete"-->
                <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
                <vlan-id>1</vlan-id> <!-- operation="delete"-->
                <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                <monitor-action>log</monitor-action> <!-- operation="delete"-->
                <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
              </config>
            </ipv6>
          </acl-entry>
        </acl-entries>
      </acl-set>
```

```
</acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls|<0-
65535>) (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)
```

---

## Configure protocol tcp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-  
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|p  
im-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-  
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|p  
im-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: dscp

Attribute Type: enum  
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-tcp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
              <tcp-source-port>echo</tcp-source-port> <!--
operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
```

```

operation="delete"--> <tcp-destination-port>echo</tcp-destination-port> <!--
<dscp>default</dscp> <!-- operation="delete"-->
<flow-label>0</flow-label> <!-- operation="delete"-->
<tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
<vlan-id>1</vlan-id> <!-- operation="delete"-->
<inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
<monitor-action>log</monitor-action> <!-- operation="delete"-->
<redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
  </ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) (eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure source address

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-source-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum  
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
```

```

    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv6>
        <config>
          <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          </protocol-tcp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
          <tcp-source-port>echo</tcp-source-port> <!--
operation="delete"-->
          <destination-address>any</destination-address> <!--
operation="delete"-->
          <lower-destination-port-in-range>0</lower-destination-port-in-
range> <!-- operation="delete"-->
          <upper-destination-port-in-range>0</upper-destination-port-in-
range> <!-- operation="delete"-->
          <dscp>default</dscp> <!-- operation="delete"-->
          <flow-label>0</flow-label> <!-- operation="delete"-->
          <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv6>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) (eq|neq|lt|gt)
(echo|discard|daytime|chargen|ftp-
data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
(any) range <0-65535> <0-65535> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure lower source port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
```



```

    <name>NAME</name>
    <config>
        <name>WORD</name>
        <type>mac</type>
    </config>
        <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <ipv6>
                <config>
                    <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                    </protocol-tcp><!-- operation="delete"-->
                    <source-address>any</source-address> <!-- operation="delete"-->
                    <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
                    <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
                    <destination-address>any</destination-address> <!--
operation="delete"-->
                    <dscp>default</dscp> <!-- operation="delete"-->
                    <flow-label>0</flow-label> <!-- operation="delete"-->
                    <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
                    <vlan-id>1</vlan-id> <!-- operation="delete"-->
                    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                    <monitor-action>log</monitor-action> <!-- operation="delete"-->
                    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
                </config>
            </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) range <0-65535> <0-65535> (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure upper source port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: tcp-destination-port

Attribute Type: enum (echo|discard|daytime|chargen|ftp-data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-tcp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
              <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
              <tcp-destination-port>echo</tcp-destination-port> <!--
operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
              <flow-label>0</flow-label> <!-- operation="delete"-->
              <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
          </ipv6>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) tcp (any) range <0-65535> <0-65535> (any)
  (eq|neq|lt|gt) (echo|discard|daytime|chargen|ftp-
  data|ftp|ssh|telnet|smtp|time|whois|tacacs|domain|gopher|finger|www|hostname|pop
  2|pop3|sunrpc|ident|nntp|bgp|irc|pim-auto-
  rp|exec|login|cmd|lpd|talk|uucp|klogin|kshell|netconf-ssh|drip|netconf-tls)
  (dscp
  (default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
  af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
  ({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
  ((log|sample)|) (redirect-to-port IFNAME|)
```

## Configure destination address

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-tcp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: tcp-flags

Attribute Type: bits (ack|established|fin|psh|rst|syn|urg)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-tcp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
              <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <lower-destination-port-in-range>0</lower-destination-port-in-
range> <!-- operation="delete"-->
              <upper-destination-port-in-range>0</upper-destination-port-in-
range> <!-- operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
            </config>
          </ipv6>
        </config>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>
```

```

        <flow-label>0</flow-label> <!-- operation="delete"-->
        <tcp-flags>ack</tcp-flags> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) tcp (any) range <0-65535> <0-65535> (any) range <0-
65535> <0-65535> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|)
({ack|established|fin|psh|rst|syn|urg}|) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure protocol udp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-udp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
              <flow-label>0</flow-label> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
          </ipv6>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) udp (any) (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)
```

---

## Configure destination port operator

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-destination-port

Attribute Type: union

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)



**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-udp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
              <udp-destination-port>echo</udp-destination-port> <!--
operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
              <flow-label>0</flow-label> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
          </ipv6>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) udp (any) (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp|<0-65535>) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure lower destination port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
```

```

    <name>NAME</name>
    <config>
        <name>WORD</name>
        <type>mac</type>
    </config>
    <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <ipv6>
                <config>
                    <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                    </protocol-udp><!-- operation="delete"-->
                    <source-address>any</source-address> <!-- operation="delete"-->
                    <destination-address>any</destination-address> <!--
operation="delete"-->
                    <lower-destination-port-in-range>0</lower-destination-port-in-
range> <!-- operation="delete"-->
                    <upper-destination-port-in-range>0</upper-destination-port-in-
range> <!-- operation="delete"-->
                    <dscp>default</dscp> <!-- operation="delete"-->
                    <flow-label>0</flow-label> <!-- operation="delete"-->
                    <vlan-id>1</vlan-id> <!-- operation="delete"-->
                    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                    <monitor-action>log</monitor-action> <!-- operation="delete"-->
                    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
                </config>
            </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (any) range <0-65535> <0-65535> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure fragments

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
```

```

        </config>
        <ipv6>
        <config>
operation="delete"-->    <forwarding-action>deny</forwarding-action> <!--
        </protocol-udp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
operation="delete"-->    <destination-address>any</destination-address> <!--
        </fragments><!-- operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
operation="delete"-->    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
        </config>
        </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (any) fragments (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure source port operator

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-source-port

Attribute Type: union

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-udp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
              <udp-source-port>echo</udp-source-port> <!--
operation="delete"-->
```

```

operation="delete"--> <destination-address>any</destination-address> <!--
                        <dscp>default</dscp> <!-- operation="delete"-->
                        <flow-label>0</flow-label> <!-- operation="delete"-->
                        <vlan-id>1</vlan-id> <!-- operation="delete"-->
                        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                        <monitor-action>log</monitor-action> <!-- operation="delete"-->
operation="delete"--> <redirect-interface-name>IFNAME</redirect-interface-name> <!--
                        </config>
                        </ipv6>
                        </acl-entry>
                        </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp|<0-65535>) (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure udp source port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-source-port

Attribute Type: enum (echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbios-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-destination-port

Attribute Type: enum (echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbios-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-udp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
```



```

operation="delete"--> <udp-source-port>echo</udp-source-port> <!--
operation="delete"--> <destination-address>any</destination-address> <!--
operation="delete"--> <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"--> <udp-destination-port>echo</udp-destination-port> <!--
operation="delete"--> <dscp>default</dscp> <!-- operation="delete"-->
operation="delete"--> <flow-label>0</flow-label> <!-- operation="delete"-->
operation="delete"--> <vlan-id>1</vlan-id> <!-- operation="delete"-->
operation="delete"--> <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
operation="delete"--> <monitor-action>log</monitor-action> <!-- operation="delete"-->
operation="delete"--> <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"--> </config>
operation="delete"--> </ipv6>
operation="delete"--> </acl-entry>
operation="delete"--> </acl-entries>
operation="delete"--> </acl-set>
operation="delete"--> </acl-sets>
operation="delete"--> </acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp) (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure upper destination port in range

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-source-port

Attribute Type: enum (echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbios-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
```

```

        </config>
        <ipv6>
        <config>
operation="delete"-->    <forwarding-action>deny</forwarding-action> <!--
        </protocol-udp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
        <udp-source-port>echo</udp-source-port> <!--
operation="delete"-->
        <destination-address>any</destination-address> <!--
operation="delete"-->
        <lower-destination-port-in-range>0</lower-destination-port-in-
range> <!-- operation="delete"-->
        <upper-destination-port-in-range>0</upper-destination-port-in-
range> <!-- operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
        </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) (eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp) (any) range <0-65535> <0-65535>
(dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure dscp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
```

```

        <sequence-id>1</sequence-id>
    </config>
    <ipv6>
    <config>
        <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
        </protocol-udp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
operation="delete"-->
        <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
        <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
        <destination-address>any</destination-address> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
    </ipv6>
    </acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) range <0-65535> <0-65535> (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure udp destination port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: udp-destination-port

Attribute Type: enum (echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbios-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
```

```

    <config>
      <sequence-id>1</sequence-id>
    </config>
    <ipv6>
      <config>
        <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
        </protocol-udp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
        <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
        <destination-address>any</destination-address> <!--
operation="delete"-->
        <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
        <udp-destination-port>echo</udp-destination-port> <!--
operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
      </config>
    </ipv6>
  </acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) range <0-65535> <0-65535> (any)
(eq|neq|lt|gt)
(echo|discard|time|nameserver|tacacs|domain|bootps|bootpc|tftp|sunrpc|ntp|netbio
s-ns|netbios-dgm|netbios-ss|snmp|snmptrap|xdmcp|dnsix|mobile-ip|pim-auto-
rp|isakmp|biff|who|syslog|talk|rip|non500-isakmp) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure flow label

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-udp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: lower-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-source-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: lower-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: upper-destination-port-in-range

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
```



```

    <name>NAME</name>
    <config>
        <name>WORD</name>
        <type>mac</type>
    </config>
    <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <ipv6>
                <config>
                    <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                    </protocol-udp><!-- operation="delete"-->
                    <source-address>any</source-address> <!-- operation="delete"-->
                    <lower-source-port-in-range>0</lower-source-port-in-range> <!--
operation="delete"-->
                    <upper-source-port-in-range>0</upper-source-port-in-range> <!--
operation="delete"-->
                    <destination-address>any</destination-address> <!--
operation="delete"-->
                    <lower-destination-port-in-range>0</lower-destination-port-in-
range> <!-- operation="delete"-->
                    <upper-destination-port-in-range>0</upper-destination-port-in-
range> <!-- operation="delete"-->
                    <dscp>default</dscp> <!-- operation="delete"-->
                    <flow-label>0</flow-label> <!-- operation="delete"-->
                    <vlan-id>1</vlan-id> <!-- operation="delete"-->
                    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                    <monitor-action>log</monitor-action> <!-- operation="delete"-->
                    <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
                </config>
            </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) udp (any) range <0-65535> <0-65535> (any) range <0-
65535> <0-65535> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure protocol icmp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
```

```

        <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
    </config>
    <ipv6>
    <config>
        <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
        </protocol-icmp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
operation="delete"-->
        <destination-address>any</destination-address> <!--
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmpv6 (any) (any) (dscp
  (default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
  af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
  4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure icmp message

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-message

Attribute Type: enum (beyond-scope|destination-unreachable|echo-reply|echo-request|header|hop-limit|mld-query|mld-reduction|mld-report|nd-na|nd-ns|next-header|no-admin|no-route|packet-too-big|parameter-option|parameter-problem|port-unreachable|reassembly-timeout|redirect|renum-command|renum-result|renum-sequence-number|router-advertisement|router-renumbering|router-solicitation|time-exceeded|unreachable)

Attribute Name: dscp

Attribute Type: enum  
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-icmp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <icmp-message>beyond-scope</icmp-message> <!--
operation="delete"-->
```

```

        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
</ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmpv6 (any) (any) (beyond-scope|destination-
unreachable|echo-reply|echo-request|header|hop-limit|mld-query|mld-
reduction|mld-report|nd-na|nd-ns|next-header|no-admin|no-route|packet-too-
big|parameter-option|parameter-problem|port-unreachable|reassembly-
timeout|redirect|renum-command|renum-result|renum-seq-number|router-
advertisement|router-renumbering|router-solicitation|time-exceeded|unreachable)
(dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure icmp type

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-type

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-icmp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <icmp-type>0</icmp-type> <!-- operation="delete"-->
            <dscp>default</dscp> <!-- operation="delete"-->
            <flow-label>0</flow-label> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
          </config>
```

```

        </ipv6>
    </acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmpv6 (any) (any) <0-255> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure icmp code

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-type

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: icmp-code

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-icmp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <icmp-type>0</icmp-type> <!-- operation="delete"-->
              <icmp-code>0</icmp-code> <!-- operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
              <flow-label>0</flow-label> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
          </ipv6>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```



## Command Syntax

```
(<1-268435453>|) (deny|permit) icmpv6 (any) (any) <0-255> <0-255> (dscp
  (default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
  af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
  4094>|) ((log|sample)|) (redirect-to-port IFNAME|)
```

## Configure vlan id

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: fragments

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
```

```

<acl-set>
  <name>NAME</name>
  <config>
    <name>WORD</name>
    <type>mac</type>
  </config>
  <type>mac</type>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv6>
        <config>
          <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          </protocol-icmp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
          <destination-address>any</destination-address> <!--
operation="delete"-->
          <dscp>default</dscp> <!-- operation="delete"-->
          <flow-label>0</flow-label> <!-- operation="delete"-->
          </fragments><!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv6>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmpv6 (any) (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) fragments (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure inner vlan id

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-message

Attribute Type: enum (beyond-scope|destination-unreachable|echo-reply|echo-request|header|hop-limit|mld-query|mld-reduction|mld-report|nd-na|nd-ns|next-header|no-admin|no-route|packet-too-big|parameter-option|parameter-problem|port-unreachable|reassembly-timeout|redirect|renum-command|renum-result|renum-sequence-number|router-advertisement|router-renumbering|router-solicitation|time-exceeded|unreachable)

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    </acl-set>
  </acl-sets>
</acl>
```

```

    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <ipv6>
        <config>
          <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          </protocol-icmp><!-- operation="delete"-->
          <source-address>any</source-address> <!-- operation="delete"-->
operation="delete"-->
          <destination-address>any</destination-address> <!--
operation="delete"-->
          <icmp-message>beyond-scope</icmp-message> <!--
          </fragments><!-- operation="delete"-->
          <dscp>default</dscp> <!-- operation="delete"-->
          <flow-label>0</flow-label> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
        </config>
      </ipv6>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmpv6 (any) (any) (beyond-scope|destination-
unreachable|echo-reply|echo-request|header|hop-limit|mld-query|mld-
reduction|mld-report|nd-na|nd-ns|next-header|no-admin|no-route|packet-too-
big|parameter-option|parameter-problem|port-unreachable|reassembly-
timeout|redirect|renum-command|renum-result|renum-seq-number|router-
advertisement|router-renumbering|router-solicitation|time-exceeded|unreachable)
fragments (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure monitor action

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-icmp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: icmp-type

Attribute Type: uint8

Attribute Range: 0-255

Attribute Name: fragments

Attribute Type: empty

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
```

```

        <sequence-id>1</sequence-id>
    </config>
    <ipv6>
    <config>
        <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
        </protocol-icmp><!-- operation="delete"-->
        <source-address>any</source-address> <!-- operation="delete"-->
        <destination-address>any</destination-address> <!--
operation="delete"-->
        <icmp-type>0</icmp-type> <!-- operation="delete"-->
        </fragments><!-- operation="delete"-->
        <dscp>default</dscp> <!-- operation="delete"-->
        <flow-label>0</flow-label> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
    </config>
    </ipv6>
    </acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) icmpv6 (any) (any) <0-255> fragments (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure protocol sctp

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-sctp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-sctp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <dscp>default</dscp> <!-- operation="delete"-->
            <flow-label>0</flow-label> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
```

```

        </config>
    </ipv6>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) sctp (any) (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure sctp destination port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-sctp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: destination-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: sctp-destination-port

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16



Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <ipv6>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </protocol-sctp><!-- operation="delete"-->
              <source-address>any</source-address> <!-- operation="delete"-->
              <destination-address>any</destination-address> <!--
operation="delete"-->
              <destination-port-operator>eq</destination-port-operator> <!--
operation="delete"-->
              <sctp-destination-port>0</sctp-destination-port> <!--
operation="delete"-->
              <dscp>default</dscp> <!-- operation="delete"-->
              <flow-label>0</flow-label> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
          </ipv6>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) sctp (any) (any) (eq|neq|lt|gt) <0-65535> (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)
```

---

## Configure sctp source port

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-sctp

Attribute Type: empty

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: source-port-operator

Attribute Type: enum (eq|neq|lt|gt)

Attribute Name: sctp-source-port

Attribute Type: uint16

Attribute Range: 0-65535

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <ipv6>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            </protocol-sctp><!-- operation="delete"-->
            <source-address>any</source-address> <!-- operation="delete"-->
            <source-port-operator>eq</source-port-operator> <!--
operation="delete"-->
            <sctp-source-port>0</sctp-source-port> <!-- operation="delete"-
->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <dscp>default</dscp> <!-- operation="delete"-->
            <flow-label>0</flow-label> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
          </config>
        </ipv6>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) sctp (any) (eq|neq|lt|gt) <0-65535> (any) (dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

---

## Configure protocol name

Use this attribute to set the interface name on which packet to be redirected (in-direction only)

This command is supported when following feature are enabled IPV6 feature

Attribute Name: redirect-interface-name

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: protocol-name

Attribute Type: union

Attribute Name: source-address

Attribute Type: enum (any)

Attribute Name: destination-address

Attribute Type: enum (any)

Attribute Name: dscp

Attribute Type: enum

(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|af43|cs5|ef|cs6|cs7)

Attribute Name: flow-label

Attribute Type: uint32

Attribute Range: 0-1048575

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
```

```

        <sequence-id>1</sequence-id>
        <config>
            <sequence-id>1</sequence-id>
        </config>
        <ipv6>
        <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <protocol-name>ipipv6</protocol-name> <!-- operation="delete"--
>
            <source-address>any</source-address> <!-- operation="delete"-->
            <destination-address>any</destination-address> <!--
operation="delete"-->
            <dscp>default</dscp> <!-- operation="delete"-->
            <flow-label>0</flow-label> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <redirect-interface-name>IFNAME</redirect-interface-name> <!--
operation="delete"-->
            </config>
        </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit)
(ipipv6|ipv6ipv6|rsvp|gre|esp|ahp|ospf|pim|ipcomp|vrrp|any|<0-255>) (any) (any)
(dscp
(default|cs1|af11|af12|af13|cs2|af21|af22|af23|cs3|af31|af32|af33|cs4|af41|af42|
af43|cs5|ef|cs6|cs7)|) (flow-label <0-1048575>|) (vlan <1-4094>|) (inner-vlan <1-
4094>|) ((log|sample)|) (redirect-to-port IFNAME|)

```

## Configure fragment monitor action

Use this attribute to enable logging or sampling of the packets on which the match occurred (in-direction only).

This command is supported when following feature are enabled CUSTOM1 ACL feature, IPV6 feature

Attribute Name: fragment-monitor-action

Attribute Type: enum (log|sample)

Attribute Name: fragment-forwarding-action

Attribute Type: enum (deny-all|permit-all)

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>

```

```

    <name>NAME</name>
    <config>
        <name>WORD</name>
        <type>mac</type>
    </config>
    <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <ipv6>
                <fragment-actions>
                    <config>
                        <fragment-forwarding-action>deny-all</fragment-forwarding-
action> <!-- operation="delete"-->
                        <fragment-monitor-action>log</fragment-monitor-action> <!--
operation="delete"-->
                    </config>
                </fragment-actions>
            </ipv6>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```
(<1-268435453>|) fragments (deny-all|permit-all) ((log|sample)|)
```

## IPI-ACL-ARP

### Configure source mac any

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: union

Attribute Name: destination-ip-address

Attribute Type: union

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <arp>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
              <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
              </destination-mac-any><!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              </source-mac-any><!-- operation="delete"-->
            </config>
          </arp>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

```

</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any|host A.B.C.D|A.B.C.D/M|A.B.C.D
A.B.C.D) (any|host A.B.C.D|A.B.C.D/M|A.B.C.D A.B.C.D) mac any any (vlan <1-
4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

---

## Configure name

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
    </acl-set>
  </acl-sets>
</acl>

```



```

        <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <arp>
                <config>
                    <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                    <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
                    <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
                    <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
                    <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
                    <vlan-id>1</vlan-id> <!-- operation="delete"-->
                    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                    <monitor-action>log</monitor-action> <!-- operation="delete"-->
                    </source-mac-any><!-- operation="delete"-->
                </config>
            </arp>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac any host (XX-XX-XX-XX-
XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

## Configure type

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <arp>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
            <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
            <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
            <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
```

```

        <monitor-action>log</monitor-action> <!-- operation="delete"-->
    </source-mac-any><!-- operation="delete"-->
</config>
</arp>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac any (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

---

## Configure source mac host

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">

```

```

<acl-sets>
  <acl-set>
    <name>NAME</name>
    <config>
      <name>WORD</name>
      <type>mac</type>
    </config>
    <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <arp>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
            <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
            </destination-mac-any><!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
          </config>
        </arp>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) any (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

## Configure sequence id

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <arp>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
            <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
            <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
          </config>
        </arp>
      </config>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>
```

```

        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
    </config>
</arp>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

---

## Configure forwarding action

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <arp>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
              <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
              <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
              <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
            </config>
          </arp>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) response ip (any) (any) mac host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)
```

---

## Configure source mac address

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>
```



```

        <arp>
        <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
            <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
            <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
            </destination-mac-any><!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
        </config>
    </arp>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) any (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

## Configure arp packet type

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <arp>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
            <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
            <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
            <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
          </config>
        </arp>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>
```

```

    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

---

## Configure source ip address

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: destination-ip-address

Attribute Type: enum (any)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <arp>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
              <destination-ip-address>any</destination-ip-address> <!--
operation="delete"-->
              <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
              <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
              <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
            </config>
          </arp>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) response ip (any) (any) mac (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-

```

```
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)
```

---

## Configure vlan id

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
          </config>
          <arp>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
```

```

operation="delete"-->      <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->      <source-ip-address>any</source-ip-address> <!--
                             <vlan-id>1</vlan-id> <!-- operation="delete"-->
                             <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                             <monitor-action>log</monitor-action> <!-- operation="delete"-->
                             </source-mac-any><!-- operation="delete"-->
                             </config>
                             </arp>
                             </acl-entry>
                             </acl-entries>
                             </acl-set>
                             </acl-sets>
                             </acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) ((request)|) ip (any) mac any (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|)

```

## Configure inner vlan id

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>

```

```

    <name>NAME</name>
    <config>
        <name>WORD</name>
        <type>mac</type>
    </config>
    <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <arp>
                <config>
                    <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                    <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
                    <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
                    <vlan-id>1</vlan-id> <!-- operation="delete"-->
                    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                    <monitor-action>log</monitor-action> <!-- operation="delete"-->
                    <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
                </config>
            </arp>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) ((request)|) ip (any) mac host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)

```

## Configure source mac mask

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: source-ip-address

Attribute Type: enum (any)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <arp>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <source-ip-address>any</source-ip-address> <!--
operation="delete"-->
              <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
            </config>
          </arp>
        </acl-entry>
      </acl-entries>
    </acl-set>
```



```
</acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) ((request)|) ip (any) mac (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (vlan <1-4094>|) (inner-vlan <1-4094>|)
((log|sample)|)
```

---

## IPI-ACL-MAC

---

### Configure source mac any

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
```

```

        <type>mac</type>
    </config>
    <type>mac</type>
    <acl-entries>
        <acl-entry>
            <sequence-id>1</sequence-id>
            <config>
                <sequence-id>1</sequence-id>
            </config>
            <mac>
                <config>
                    <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
                    </destination-mac-any><!-- operation="delete"-->
                    <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
                    <cos-value>0</cos-value> <!-- operation="delete"-->
                    <vlan-id>1</vlan-id> <!-- operation="delete"-->
                    <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                    <monitor-action>log</monitor-action> <!-- operation="delete"-->
                    </source-mac-any><!-- operation="delete"-->
                </config>
            </mac>
        </acl-entry>
    </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) any any arp (request|response) (cos <0-7>|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

## Configure name

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <cos-value>0</cos-value> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              </source-mac-any><!-- operation="delete"-->
            </config>
          </mac>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) any host (XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (request|response) (cos <0-7>|) (vlan <1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)
```

## Configure type

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
```

```

        <sequence-id>1</sequence-id>
    <config>
        <sequence-id>1</sequence-id>
    </config>
    <mac>
    <config>
        <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
        <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
        <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
        <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
        <cos-value>0</cos-value> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        </source-mac-any><!-- operation="delete"-->
    </config>
</mac>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) any (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (request|response) (cos <0-7>|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

## Configure source mac host

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </destination-mac-any><!-- operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <cos-value>0</cos-value> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
            </config>
          </mac>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) host (XX-XX-XX-XX-XX-XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) any arp (request|response) (cos <0-7>|)
(vlan <1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)
```

---

## Configure sequence id

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
```

```

        <sequence-id>1</sequence-id>
    </config>
    <mac>
    <config>
        <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
        <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
        <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
        <cos-value>0</cos-value> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
    </config>
</mac>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (request|response) (cos <0-7>|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

## Configure forwarding action

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7



Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
              <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <cos-value>0</cos-value> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
            </config>
          </mac>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>
```

## Command Syntax

```
(<1-268435453>|) (deny|permit) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (request|response) (cos <0-7>|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)
```

---

## Configure source mac address

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
```

```

    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
        <config>
          <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
          </destination-mac-any><!-- operation="delete"-->
          <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
          <cos-value>0</cos-value> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
        </config>
      </mac>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) any arp (request|response) (cos <0-7>|)
(vlan <1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

## Configure source mac mask

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
        <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
              <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <cos-value>0</cos-value> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
            </config>
          </mac>
```

```

    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (request|response) (cos <0-7>|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

---

## Configure destination mac address

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
              <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
              <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <cos-value>0</cos-value> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
            </config>
          </mac>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (request|response) (cos <0-7>|) (vlan
<1-4094>|) (inner-vlan <1-4094>|) ((log|sample)|)

```

---

## Configure destination mac any

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
```

```

        </destination-mac-any><!-- operation="delete"-->
        <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
        <cos-value>0</cos-value> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
        </source-mac-any><!-- operation="delete"-->
    </config>
</mac>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

( <1-268435453>| ) (deny|permit) any any arp (cos <0-7>| ) (vlan <1-4094>| ) (inner-
vlan <1-4094>| ) ((log|sample)| )

```

## Configure destination mac host

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)



**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <cos-value>0</cos-value> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            </source-mac-any><!-- operation="delete"-->
          </config>
        </mac>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) any host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (cos <0-7>|) (vlan <1-4094>|) (inner-
vlan <1-4094>|) ((log|sample)|)

```

**Configure destination mac mask**

Use this attribute to indicate any source address.

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
            <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
```

```

        <cos-value>0</cos-value> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
    </source-mac-any><!-- operation="delete"-->
</config>
</mac>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) any (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (cos <0-7>|) (vlan <1-4094>|) (inner-
vlan <1-4094>|) ((log|sample)|)

```

## Configure arp packet type

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
      <acl-entries>
        <acl-entry>
          <sequence-id>1</sequence-id>
          <config>
            <sequence-id>1</sequence-id>
          </config>
          <mac>
            <config>
              <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
              </destination-mac-any><!-- operation="delete"-->
              <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
              <cos-value>0</cos-value> <!-- operation="delete"-->
              <vlan-id>1</vlan-id> <!-- operation="delete"-->
              <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
              <monitor-action>log</monitor-action> <!-- operation="delete"-->
              <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
            </config>
          </mac>
        </acl-entry>
      </acl-entries>
    </acl-set>
  </acl-sets>
</acl>

```

**Command Syntax**

```

(<1-268435453>|) (deny|permit) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) any arp (cos <0-7>|) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|)

```

**Configure cos value**

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
            <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
            <cos-value>0</cos-value> <!-- operation="delete"-->
            <vlan-id>1</vlan-id> <!-- operation="delete"-->
            <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
            <monitor-action>log</monitor-action> <!-- operation="delete"-->
            <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
```

```

        </config>
    </mac>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (cos <0-7>|) (vlan <1-4094>|) (inner-
vlan <1-4094>|) ((log|sample)|)

```

---

## Configure vlan id

Use this attribute to set Host source address.

Attribute Name: source-mac-host

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: destination-mac-address

Attribute Type: string

Attribute Name: destination-mac-mask

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>

```

```

<acl-set>
  <name>NAME</name>
  <config>
    <name>WORD</name>
    <type>mac</type>
  </config>
  <type>mac</type>
  <acl-entries>
    <acl-entry>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <mac>
        <config>
          <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          <destination-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-address> <!-- operation="delete"--
>
          <destination-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-mask> <!-- operation="delete"-->
          <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
          <cos-value>0</cos-value> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <source-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-host> <!-- operation="delete"-->
        </config>
      </mac>
    </acl-entry>
  </acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (cos <0-7>|) (vlan <1-4094>|) (inner-
vlan <1-4094>|) ((log|sample)|)

```

## Configure inner vlan id

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action  
 Attribute Type: enum (deny|permit)  
 Attribute Name: source-mac-mask  
 Attribute Type: string  
 Attribute Name: destination-mac-any  
 Attribute Type: empty  
 Attribute Name: arp-packet-type  
 Attribute Type: enum (none|request|response)  
 Attribute Name: cos-value  
 Attribute Type: uint8  
 Attribute Range: 0-7  
 Attribute Name: vlan-id  
 Attribute Type: uint16  
 Attribute Range: 1-4094  
 Attribute Name: inner-vlan-id  
 Attribute Type: uint16  
 Attribute Range: 1-4094  
 Attribute Name: monitor-action  
 Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
            <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
            </destination-mac-any><!-- operation="delete"-->
          </config>
        </mac>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>
```



```

operation="delete"-->      <arp-packet-type>none</arp-packet-type> <!--
                             <cos-value>0</cos-value> <!-- operation="delete"-->
                             <vlan-id>1</vlan-id> <!-- operation="delete"-->
                             <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
                             <monitor-action>log</monitor-action> <!-- operation="delete"-->
                             <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
                             </config>
                             </mac>
                             </acl-entry>
                             </acl-entries>
                             </acl-set>
                             </acl-sets>
                             </acl>

```

## Command Syntax

```

(<1-268435453>|) (deny|permit) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) any arp (cos <0-7>|) (vlan <1-4094>|)
(inner-vlan <1-4094>|) ((log|sample)|)

```

## Configure monitor action

Use this attribute to set source mac-address.

Attribute Name: source-mac-address

Attribute Type: string

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: source-mac-mask

Attribute Type: string

Attribute Name: destination-mac-host

Attribute Type: string

Attribute Name: arp-packet-type

Attribute Type: enum (none|request|response)

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

### Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
          <source-mac-mask>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-mask> <!-- operation="delete"-->
          <destination-mac-host>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</destination-mac-host> <!-- operation="delete"-->
          <arp-packet-type>none</arp-packet-type> <!--
operation="delete"-->
          <cos-value>0</cos-value> <!-- operation="delete"-->
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
          <monitor-action>log</monitor-action> <!-- operation="delete"-->
          <source-mac-address>XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX</source-mac-address> <!-- operation="delete"-->
          </config>
        </mac>
      </acl-entry>
    </acl-entries>
  </acl-set>
</acl-sets>
</acl>
```

### Command Syntax

```
(<1-268435453>|) (deny|permit) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) host (XX-XX-XX-XX-XX-
XX|XX:XX:XX:XX:XX:XX|XXXX.XXXX.XXXX) arp (cos <0-7>|) (vlan <1-4094>|) (inner-
vlan <1-4094>|) ((log|sample)|)
```

---

## Configure ethertype

Use this attribute to enable logging or sampling of the packets on which the match occurred (in-direction only).

Attribute Name: monitor-action

Attribute Type: enum (log|sample)

Attribute Name: forwarding-action

Attribute Type: enum (deny|permit)

Attribute Name: source-mac-any

Attribute Type: empty

Attribute Name: destination-mac-any

Attribute Type: empty

Attribute Name: ethertype

Attribute Type: union

Attribute Name: cos-value

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <acl-sets>
    <acl-set>
      <name>NAME</name>
      <config>
        <name>WORD</name>
        <type>mac</type>
      </config>
      <type>mac</type>
    <acl-entries>
      <acl-entry>
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
        <mac>
          <config>
            <forwarding-action>deny</forwarding-action> <!--
operation="delete"-->
```

```

        </source-mac-any><!-- operation="delete"-->
        </destination-mac-any><!-- operation="delete"-->
        <ethertype>ipv4</ethertype> <!-- operation="delete"-->
        <cos-value>0</cos-value> <!-- operation="delete"-->
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
        <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        <monitor-action>log</monitor-action> <!-- operation="delete"-->
    </config>
</mac>
</acl-entry>
</acl-entries>
</acl-set>
</acl-sets>
</acl>

```

## Command Syntax

```

( <1-268435453>| ) (deny|permit) any any ( (ipv4|vines-echo|etype-6000|mop-dump|mop-
console|decnet-iv|lat|diagnostic|lavc-sca|etype-
8042|appletalk|aarp|ipv6|mpls|ETHTYPE)| ) (cos <0-7>| ) (vlan <1-4094>| ) (inner-
vlan <1-4094>| ) ((log|sample)| )

```

# IPI-ACL-PORTS

## Configure acl name

The name of the access-list set applied on the interface

Attribute Name: acl-name

Attribute Type: string

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <ingress-acl-sets>
    <ingress-acl-set>
        <acl-type>ip</acl-type>
        <config>
            <acl-type>ip</acl-type>
        </config>
    <access-groups>
    <access-group> <!-- operation="delete"-->
        <acl-name>WORD</acl-name>
    </config>

```

```

        <acl-name>WORD</acl-name>
    </config>
</access-group>
</access-groups>
</ingress-acl-set>
</ingress-acl-sets>
</interface>
</interfaces>
</acl>

```

## Command Syntax

```
ip access-group NAME in
```

---

## Configure name

The name of the access-list set applied on the interface

Attribute Name: acl-name

Attribute Type: string

Attribute Name: time-range

Attribute Type: string

## Netconf edit-config payload

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <ingress-acl-sets>
      <ingress-acl-set>
        <acl-type>mac</acl-type>
        <config>
          <acl-type>mac</acl-type>
        </config>
        <access-groups>
        <access-group>
          <acl-name>WORD</acl-name>
          <config>
            <acl-name>WORD</acl-name>
            <time-range>WORD</time-range>
          </config>
        </access-group>
      </access-groups>
    </ingress-acl-set>
  </ingress-acl-sets>
</interface>
</interfaces>

```

```
</acl>
```

## Command Syntax

```
ip access-group NAME in time-range WORD
```

---

## Configure acl type

Reference to the base interface name

Attribute Name: name

Attribute Type: string

Attribute Name: acl-type

Attribute Type: enum (mac|ip|ipv6|arp)

Attribute Name: acl-name

Attribute Type: string

## Netconf edit-config payload

```
<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <interfaces>
    <interface> <!-- operation="delete"-->
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <ingress-acl-sets>
        <ingress-acl-set>
          <acl-type>ipv6</acl-type>
          <access-groups>
            <access-group>
              <acl-name>WORD</acl-name>
            </access-group>
          </access-groups>
        </ingress-acl-set>
      </ingress-acl-sets>
    </interface>
  </interfaces>
</acl>
```

## Command Syntax

```
ipv6 access-group NAME in
```

---

## Configure time range

The time-range associated with this access-group

Attribute Name: time-range

Attribute Type: string

**Netconf edit-config payload**

```

<acl xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <ingress-acl-sets>
        <ingress-acl-set>
          <acl-type>mac</acl-type>
          <config>
            <acl-type>mac</acl-type>
          </config>
          <access-groups>
            <access-group>
              <acl-name>WORD</acl-name>
              <config>
                <acl-name>WORD</acl-name>
              </config>
              <time-range>WORD</time-range> <!-- operation="delete"-->
            </access-group>
          </access-groups>
        </ingress-acl-set>
      </ingress-acl-sets>
    </interface>
  </interfaces>
</acl>

```

**Command Syntax**

```
ipv6 access-group NAME in time-range WORD
```

---

**clear access-list counters****Netconf RPC payload**

```

<ipi-acl-ports_clear-access-list-counters-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl"/>

```

**Command Syntax**

```
clear access-list counters
```

---

**clear access-list NAME counters**

Attribute Name: name

Attribute Type: string

**Netconf RPC payload**

```

<ipi-acl-ports_clear-access-list-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">

```

```
<name>NAME</name>
</ipi-acl-ports_clear-access-list-counters>
```

## Command Syntax

```
clear access-list NAME counters
```

---

## clear ip access-list counters

### Netconf RPC payload

```
<ipi-acl-ports_clear-ip-access-list-counters-all xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-acl"/>
```

## Command Syntax

```
clear ip access-list counters
```

---

## clear ip access-list NAME counters

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```
<ipi-acl-ports_clear-ip-access-list-counters xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-acl">
  <name>NAME</name>
</ipi-acl-ports_clear-ip-access-list-counters>
```

## Command Syntax

```
clear ip access-list NAME counters
```

---

## clear ipv6 access-list counters

### Netconf RPC payload

```
<ipi-acl-ports_clear-ipv6-access-list-counters-all xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-acl"/>
```

## Command Syntax

```
clear ipv6 access-list counters
```

---

## clear ipv6 access-list NAME counters

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```
<ipi-acl-ports_clear-ipv6-access-list-counters xmlns="http://www.ipinfusion.com/
yang/ocnos/ipi-acl">
  <name>NAME</name>
```



```
</ipi-acl-ports_clear-ipv6-access-list-counters>
```

## Command Syntax

```
clear ipv6 access-list NAME counters
```

---

## clear mac access-list counters

### Netconf RPC payload

```
<ipi-acl-ports_clear-mac-access-list-counters-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl"/>
```

## Command Syntax

```
clear mac access-list counters
```

---

## clear mac access-list NAME counters

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```
<ipi-acl-ports_clear-mac-access-list-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <name>NAME</name>
</ipi-acl-ports_clear-mac-access-list-counters>
```

## Command Syntax

```
clear mac access-list NAME counters
```

---

## clear arp access-list counters

### Netconf RPC payload

```
<ipi-acl-ports_clear-arp-access-list-counters-all xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl"/>
```

## Command Syntax

```
clear arp access-list counters
```

---

## clear arp access-list NAME counters

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```
<ipi-acl-ports_clear-arp-access-list-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-acl">
  <name>NAME</name>
</ipi-acl-ports_clear-arp-access-list-counters>
```

---

## Command Syntax

```
clear arp access-list NAME counters
```

---

# IPI-DHCP-SNOOPING

---

## Configure options

Use this attribute to debug the DHCP snooping feature.

Attribute Name: options

Attribute Type: bits (event|rx|tx|packet|all)

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <debug>
      <config>
        <options>event</options> <!-- operation="delete"-->
      </config>
    </debug>
  </snooping>
</dhcp>
```

## Command Syntax

```
debug ip dhcp snooping (event|rx|tx|packet|all)
```

---

## Configure snooping enable

Enable DHCP snooping feature

Attribute Name: snooping-enable

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
      </snooping-bridge>
    </snooping-bridges>
  </snooping>
</dhcp>
```

---

## Command Syntax

```
ip dhcp snooping bridge <1-32>
```

---

## Configure verify mac address

Use this command to enable MAC address verification.

Attribute Name: verify-mac-address

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
        </verify-mac-address><!-- operation="delete"-->
      </snooping-bridge>
    </snooping-bridges>
  </snooping>
</dhcp>
```

## Command Syntax

```
ip dhcp snooping verify mac-address bridge <1-32>
```

---

## Configure option 82 enable

Use this command to insert interface and VLAN name in the option 82 field in DHCP packets.

Attribute Name: option-82-enable

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
        </option-82-enable><!-- operation="delete"-->
      </snooping-bridge>
    </snooping-bridges>
  </snooping>
</dhcp>
```

---

## Command Syntax

```
ip dhcp snooping information option bridge <1-32>
```

---

## Configure write delay

Configure DHCP snooping database write delay in multiples of 10 seconds

Attribute Name: write-delay

Attribute Type: uint32

Default Value: 300

Attribute Range: 20-86400

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
          </config>
          <write-delay>20</write-delay> <!-- operation="delete"-->
        </snooping-bridge>
      </snooping-bridges>
    </snooping>
  </dhcp>
```

## Command Syntax

```
ip dhcp snooping database write-delay <20-86400> bridge <1-32>
```

---

## Configure strict validation

Use this command to enable strict validation of DHCP packets.

Attribute Name: strict-validation

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
          </config>
          </strict-validation><!-- operation="delete"-->
        </snooping-bridge>
      </snooping-bridges>
    </snooping>
  </dhcp>
```

```
</snooping>
</dhcp>
```

## Command Syntax

```
ip dhcp packet strict-validation bridge <1-32>
```

---

## Configure vlan range

Use this command to enable DHCP snooping for the given VLAN.

Attribute Name: vlan-range

Attribute Type: string

Attribute Range: 2-4094

## Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
        <vlan-range>VLAN_RANGE</vlan-range> <!-- operation="delete"-->
      </snooping-bridge>
    </snooping-bridges>
  </snooping>
</dhcp>
```

## Command Syntax

```
ip dhcp snooping vlan VLAN_RANGE bridge <1-32>
```

---

## Configure enable

Use this command to enable/disable arp-inspection on the bridge.

Attribute Name: enable

Attribute Type: empty

## Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
        <arp-inspection>

```

```

    <config>
        </enable>
    </config>
</arp-inspection>
</snooping-bridge>
</snooping-bridges>
</snooping>
</dhcp>

```

## Command Syntax

```
ip dhcp snooping arp-inspection bridge <1-32>
```

---

## Configure validate

Use this command to enable validation of the source-mac, destination-mac, or IP address field in the ARP packet payload.

Attribute Name: validate

Attribute Type: enum (src-mac|dst-mac|ip)

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
        <arp-inspection>
          <config>
            <validate>src-mac</validate> <!-- operation="delete"-->
          </config>
        </arp-inspection>
      </snooping-bridge>
    </snooping-bridges>
  </snooping>
</dhcp>

```

## Command Syntax

```
ip dhcp snooping arp-inspection validate (src-mac|dst-mac|ip) bridge <1-32>
```

---

## Configure bridge id

Use this command to enable ARP inspection on the VLAN in a bridge.

Attribute Name: vlan-range

Attribute Type: string

Attribute Range: 2-4094

**Netconf edit-config payload**

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
      <arp-inspection>
        <config>
          <vlan-range>VLAN_RANGE</vlan-range> <!-- operation="delete"-->
        </config>
      </arp-inspection>
    </snooping-bridge>
  </snooping-bridges>
</snooping>
</dhcp>

```

**Command Syntax**

```
ip dhcp snooping arp-inspection vlan VLAN_RANGE bridge <1-32>
```

---

**Configure if name**

Use this attribute to set the interface name

Attribute Name: if-name

Attribute Type: string

Attribute Name: ipv4-address

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
      <vlangs>
        <vlan>
          <vlan-id>1</vlan-id>
          <config>
            <vlan-id>1</vlan-id>
          </config>
          <mac-addresses-ipv4>
            <mac-address-ipv4>
              <mac-address>XXXX.XXXX.XXXX</mac-address>
            </mac-address-ipv4>
          </mac-addresses-ipv4>
        </vlan>
      </vlangs>
    </snooping-bridge>
  </snooping-bridges>
</snooping>
</dhcp>

```

```

    <config>
      <mac-address>XXXX.XXXX.XXXX</mac-address>
      <ipv4-address>A.B.C.D</ipv4-address>
    </config>
    <if-name>IFNAME</if-name>
  </mac-address-ipv4>
</mac-addresses-ipv4>
</vlan>
</vlans>
</snooping-bridge>
</snooping-bridges>
</snooping>
</dhcp>

```

## Command Syntax

```
ip dhcp snooping binding bridge <1-32> XXXX.XXXX.XXXX <1-4094> ipv4 A.B.C.D IFNAME
```

## Configure mac address

Use this attribute to set the interface name

This command is supported when following feature are enabled HAVE\_IPV6 feature enabled

Attribute Name: if-name

Attribute Type: string

Attribute Name: ipv6-address

Attribute Type: inet:ipv6-address

## Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <snooping-bridges>
      <snooping-bridge>
        <bridge-id>1</bridge-id>
        <config>
          <bridge-id>1</bridge-id>
        </config>
      </snooping-bridge>
    </snooping-bridges>
    <vlans>
      <vlan>
        <vlan-id>1</vlan-id>
        <config>
          <vlan-id>1</vlan-id>
        </config>
        <mac-addresses-ipv6>
          <mac-address-ipv6>
            <mac-address>XXXX.XXXX.XXXX</mac-address>
            <config>
              <mac-address>XXXX.XXXX.XXXX</mac-address>
              <ipv6-address>X:X::X:X</ipv6-address>
            </config>
          </mac-address-ipv6>
        </mac-addresses-ipv6>
      </vlan>
    </vlans>
  </snooping>
</dhcp>

```



```

        <if-name>IFNAME</if-name>
    </mac-address-ipv6>
</mac-addresses-ipv6>
</vlan>
</vlans>
</snooping-bridge>
</snooping-bridges>
</snooping>
</dhcp>

```

### Command Syntax

```
ip dhcp snooping binding bridge <1-32> XXXX.XXXX.XXXX <1-4094> ipv6 X:X::X:X IFNAME
```

---

## ip dhcp snooping database bridge WORD

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```

<ipi-dhcp-snooping_dhcp-snooping-write-database xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <bridge-id>WORD</bridge-id>
</ipi-dhcp-snooping_dhcp-snooping-write-database>

```

### Command Syntax

```
ip dhcp snooping database bridge WORD
```

---

## renew ip dhcp snooping binding database bridge WORD

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```

<ipi-dhcp-snooping_dhcp-snooping-renew-database xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <bridge-id>WORD</bridge-id>
</ipi-dhcp-snooping_dhcp-snooping-renew-database>

```

### Command Syntax

```
renew ip dhcp snooping binding database bridge WORD
```

---

## ip dhcp snooping source database bridge WORD

Attribute Name: bridge-id

Attribute Type: string

---

### Netconf RPC payload

```
<ipi-dhcp-snooping_dhcp-snooping-write-source-binding-database xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <bridge-id>WORD</bridge-id>
</ipi-dhcp-snooping_dhcp-snooping-write-source-binding-database>
```

### Command Syntax

```
ip dhcp snooping source database bridge WORD
```

---

## renew ip dhcp snooping source binding database bridge WORD

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<ipi-dhcp-snooping_dhcp-snooping-renew-source-database xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <bridge-id>WORD</bridge-id>
</ipi-dhcp-snooping_dhcp-snooping-renew-source-database>
```

### Command Syntax

```
renew ip dhcp snooping source binding database bridge WORD
```

---

## clear ip dhcp snooping source binding database bridge WORD

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<ipi-dhcp-snooping_dhcp-snooping-clear-source-binding-database xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <bridge-id>WORD</bridge-id>
</ipi-dhcp-snooping_dhcp-snooping-clear-source-binding-database>
```

### Command Syntax

```
clear ip dhcp snooping source binding database bridge WORD
```

---

## clear ip dhcp snooping binding database bridge WORD

Attribute Name: bridge-id

Attribute Type: string

### Netconf RPC payload

```
<ipi-dhcp-snooping_dhcp-snooping-clear-database xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <bridge-id>WORD</bridge-id>
</ipi-dhcp-snooping_dhcp-snooping-clear-database>
```

---

## Command Syntax

```
clear ip dhcp snooping binding bridge WORD
```

---

## debug ip dhcp snooping (event|rx|tx|packet|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|rx|tx|packet|all)

### Netconf RPC payload

```
<ipi-dhcp-snooping_dhcp-snooping-terminal-debug-on xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <terminal-debug-options>event</terminal-debug-options>
</ipi-dhcp-snooping_dhcp-snooping-terminal-debug-on>
```

## Command Syntax

```
debug ip dhcp snooping (event|rx|tx|packet|all)
```

---

## no debug ip dhcp snooping (event|rx|tx|packet|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|rx|tx|packet|all)

### Netconf RPC payload

```
<ipi-dhcp-snooping_dhcp-snooping-terminal-debug-off xmlns="http://
www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <terminal-debug-options>event</terminal-debug-options>
</ipi-dhcp-snooping_dhcp-snooping-terminal-debug-off>
```

## Command Syntax

```
no debug ip dhcp snooping (event|rx|tx|packet|all)
```

---

# IPI-DHCP-SNOOPING-INTERFACE

---

## Configure snooping trust

Use this command to enable the snooping trust on the interface level.

Attribute Name: snooping-trust

Attribute Type: empty

### Netconf edit-config payload

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
```

```

        <name>WORD</name>
    </config>
    <trust>
    <config>
        </snooping-trust><!-- operation="delete"-->
    </config>
    </trust>
</interface>
</interfaces>
</snooping>
</dhcp>

```

### Command Syntax

```
ip dhcp snooping trust
```

---

## Configure verify snooping vlan

Use this command to enable the IPSG feature at the interface level.

Attribute Name: verify-snooping-vlan

Attribute Type: empty

### Netconf edit-config payload

```

<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
          </config>
          <verify>
            <config>
              </verify-snooping-vlan>
            </config>
          </verify>
        </interface>
      </interfaces>
    </snooping>
  </dhcp>

```

### Command Syntax

```
ip verify source dhcp-snooping-vlan
```

---

## Configure verify access group mode

Use this command to enable the snooping access-group on the interface level.

Attribute Name: verify-access-group-mode

Attribute Type: empty

**Netconf edit-config payload**

```
<dhcp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-dhcp">
  <snooping>
    <interfaces>
      <interface>
        <name>WORD</name>
        <config>
          <name>WORD</name>
        </config>
        <verify>
          <config>
            </verify-access-group-mode><!-- operation="delete"-->
          </config>
        </verify>
      </interface>
    </interfaces>
  </snooping>
</dhcp>
```

**Command Syntax**

```
ip verify source access-group mode merge
```

---

**clear hsl ipc-stat VALUE VALUE**

Attribute Name: start-value

Attribute Type: uint16

Attribute Name: end-value

Attribute Type: uint16

**Netconf RPC payload**

```
<platform-clear-hsl-ipc-stat-values xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-ras">
  <start-value>VALUE</start-value>
  <end-value>VALUE</end-value>
</platform-clear-hsl-ipc-stat-values>
```

**Command Syntax**

```
clear hsl ipc-stat VALUE VALUE
```

---

**clear hsl ipc-stat****Netconf RPC payload**

```
<platform-clear-hsl-ipc-stat xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
ras"/>
```

**Command Syntax**

```
clear hsl ipc-stat
```

---

## clear hsl mlag mac-sync-count

### Netconf RPC payload

```
<platform-clear-hsl-mlag-mac-sync xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-ras"/>
```

### Command Syntax

```
clear hsl mlag mac-sync-count
```

---

## clear hardware-discard-counters

### Netconf RPC payload

```
<platform-clear-hardware-discard-counters xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-ras"/>
```

### Command Syntax

```
clear hardware-discard-counters
```

---

## clear hsl fdb debug-counters

### Netconf RPC payload

```
<platform-clear-hsl-fdb-debug-counters xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-ras"/>
```

### Command Syntax

```
clear hsl fdb debug-counters
```

---

## clear hsl system-cpu-stats

### Netconf RPC payload

```
<platform-clear-hsl-system-cpu-stats xmlns="http://www.ipinfusion.com/yang/
ocnos/ipi-ras"/>
```

### Command Syntax

```
clear hsl system-cpu-stats
```

---

## IPI-UNICAST-RPF

---

### Configure enable route lookup

Use this attribute to enable uRPF globally on the system

This command is supported when following feature are enabled Unicast Reverse Path Forwarding feature

Attribute Name: enable-route-lookup

Attribute Type: empty

**Netconf edit-config payload**

```
<unicast-rpf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-unicast-rpf">
  <global>
    <config>
      </enable-route-lookup><!-- operation="delete"-->
    </config>
  </global>
</unicast-rpf>
```

**Command Syntax**

```
ip urpf enable
```

---

**Configure source reachability mode**

Use this attribute to enable uRPF for an interface with specified reachability mode

Attribute Name: source-reachability-mode

Attribute Type: enum (any|rx|any allow-default)

**Netconf edit-config payload**

```
<unicast-rpf xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-unicast-rpf">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <source-reachability-mode>any</source-reachability-mode> <!--
operation="delete"-->
    </interface>
  </interfaces>
</unicast-rpf>
```

**Command Syntax**

```
ip verify unicast source reachable-via (any|rx|any allow-default)
```

---

**IPI-OSPF-INTERFACE-TRACKING**

---

**Configure event name**

Attribute used to specify the event-name for OSPF interface tracking.

Attribute Name: event-name

Attribute Type: string

Attribute Name: event-match-criteria

Attribute Type: enum (all|any)

**Netconf edit-config payload**

```

<ospf-interfaces-events-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
ospf-interface-tracking">
  <ospf-interface-events-tracking> <!-- operation="delete"-->
    <event-name>NAME</event-name>
    <config>
      <event-name>NAME</event-name>
      <event-match-criteria>all</event-match-criteria>
    </config>
  </ospf-interface-events-tracking>
</ospf-interfaces-events-tracking>

```

**Command Syntax**

```
if-event-track ospf event NAME match (all|any)
```

---

**Configure event neighbor ip address**

Attribute used to specify the event neighbor IP address for OSPF interface tracking event.

Attribute Name: event-neighbor-ip-address

Attribute Type: inet:ipv4-address

**Netconf edit-config payload**

```

<ospf-interfaces-events-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
ospf-interface-tracking">
  <ospf-interface-events-tracking>
    <event-name>NAME</event-name>
    <config>
      <event-name>NAME</event-name>
    </config>
    <event-neighbor-ip-address>A.B.C.D</event-neighbor-ip-address> <!--
operation="delete"-->
  </ospf-interface-events-tracking>
</ospf-interfaces-events-tracking>

```

**Command Syntax**

```
event nbr A.B.C.D down
```

---

**Configure name**

Attribute used to specify the interface name for OSPF interface tracking event action.

Attribute Name: name

Attribute Type: string

Attribute Name: cost

Attribute Type: uint32

Attribute Range: 1-65535



**Netconf edit-config payload**

```

<ospf-interfaces-events-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
ospf-interface-tracking">
  <ospf-interface-events-tracking>
    <event-name>NAME</event-name>
    <config>
      <event-name>NAME</event-name>
    </config>
  <actions>
  <interfaces>
  <interface> <!-- operation="delete"-->
    <name>IFNAME</name>
    <config>
      <name>IFNAME</name>
      <cost>1</cost>
    </config>
  </interface>
</interfaces>
</actions>
</ospf-interface-events-tracking>
</ospf-interfaces-events-tracking>

```

**Command Syntax**

```
action interface IFNAME cost <1-65535>
```

---

**IPI-PORT-MIRROR**

---

**Configure id**

Port mirror session index

Attribute Name: id

Attribute Type: uint32

Attribute Range: 1-18

Attribute Name: type

Attribute Type: enum (local|remote)

**Netconf edit-config payload**

```

<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
  <sessions>
  <session> <!-- operation="delete"-->
    <id>1</id>
    <config>
      <id>1</id>
      <type>local</type>
    </config>
  </session>

```

```
</sessions>
</port-mirror>
```

## Command Syntax

```
monitor session <1-18> (type (local|remote)|)
```

---

## Configure enabled

Use this attribute to shut/unshut a port-mirror session

Attribute Name: enabled

Attribute Type: uint8

## Netconf edit-config payload

```
<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
<sessions>
<session>
  <id>1</id>
  <config>
    <id>1</id>
  </config>
  </enabled><!-- operation="delete"-->
</session>
</sessions>
</port-mirror>
```

## Command Syntax

```
no shut
```

---

## Configure description

Use this attribute to add a description to port-mirror session

This command is supported when following feature are enabled advance mirror feature

Attribute Name: description

Attribute Type: string

Attribute Range: 1-32

## Netconf edit-config payload

```
<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
<sessions>
<session>
  <id>1</id>
  <config>
    <id>1</id>
  </config>
  <description>LINE</description> <!-- operation="delete"-->
</session>
</sessions>
```

---

```
</port-mirror>
```

## Command Syntax

```
description LINE
```

---

## Configure source vlan

use this attribute to configure source-vlan

This command is supported when following feature are enabled advance mirror feature

Attribute Name: source-vlan

Attribute Type: string

Attribute Range: 2-4094

## Netconf edit-config payload

```
<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
  <sessions>
    <session>
      <id>1</id>
      <config>
        <id>1</id>
      </config>
      <source-vlan>VLAN_RANGE</source-vlan> <!-- operation="delete"-->
    </session>
  </sessions>
</port-mirror>
```

## Command Syntax

```
source vlan VLAN_RANGE
```

---

## Configure interface name

Use this attribute to configure port mirror local interface

This command is supported when following feature are enabled advance mirror feature

Attribute Name: interface-name

Attribute Type: string

## Netconf edit-config payload

```
<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
  <sessions>
    <session>
      <id>1</id>
      <config>
        <id>1</id>
      </config>
      <destination>
        <local>
      </config>
```

```

        <interface-name>IFNAME</interface-name> <!-- operation="delete"-->
</config>
</local>
</destination>
</session>
</sessions>
</port-mirror>

```

## Command Syntax

```
destination interface IFNAME
```

---

## Configure reflector interface name

Use this attribute to configure port mirror remote reflector interface

This command is supported when following feature are enabled advance mirror feature

Attribute Name: reflector-interface-name

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

## Netconf edit-config payload

```

<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
<sessions>
<session>
    <id>1</id>
    <config>
        <id>1</id>
    </config>
<destination>
<remote>
<config>
    <vlan-id>2</vlan-id>
    <reflector-interface-name>IFNAME</reflector-interface-name>
</config>
</remote>
</destination>
</session>
</sessions>
</port-mirror>

```

## Command Syntax

```
destination remote vlan <2-4094> reflector-port IFNAME
```

---

## Configure direction

Source interface direction

This command is supported when following feature are enabled advance mirror feature

Attribute Name: direction

Attribute Type: bits (rx|tx|both)

### Netconf edit-config payload

```
<port-mirror xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-mirror">
  <sessions>
    <session>
      <id>1</id>
      <config>
        <id>1</id>
      </config>
      <source-interfaces>
        <source-interface>
          <name>IFNAME</name>
          <config>
            <name>IFNAME</name>
            </config>
            <direction>rx</direction>
          </source-interface>
        </source-interfaces>
      </session>
    </sessions>
  </port-mirror>
```

### Command Syntax

```
source interface IFNAME ((rx|tx|both) |)
```

---

## IPI-RIPNG

---

### Configure options

This attribute enables debugging for RIPng

Attribute Name: options

Attribute Type: bits (all|events|packet send|packet recv|packet|packet detail|nsm|rib)

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <debug>
    <config>
      <options>all</options> <!-- operation="delete"-->
    </config>
  </debug>
</ripng>
```

---

## Command Syntax

```
debug ipv6 rip (all|events|packet send|packet recv|packet|packet detail|nsm|rib|)
```

---

## Configure split horizon

Use this attribute to perform the split-horizon action on the interface. Deleting this attribute would set the split-horizon to poisoned reverse which is the default value.

Attribute Name: split-horizon

Attribute Type: boolean

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <split-horizon>true</split-horizon> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ripng>
```

## Command Syntax

```
ipv6 rip split-horizon
```

---

## Configure name

Use this attribute to perform the split-horizon action on the interface. Deleting this attribute would set the split-horizon to poisoned reverse which is the default value.

Attribute Name: split-horizon

Attribute Type: boolean

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <split-horizon>true</split-horizon> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ripng>
```

## Command Syntax

```
no ipv6 rip split-horizon
```

---

## Configure enabled

Use this attribute to perform the router rip action on the interface

Attribute Name: enabled

Attribute Type: empty

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </enabled><!-- operation="delete"-->
    </interface>
  </interfaces>
</ripng>
```

### Command Syntax

```
ipv6 router rip
```

---

## Configure metric offset

Use this attribute to perform the metric-offset action on the interface

Attribute Name: metric-offset

Attribute Type: uint8

Attribute Range: 1-16

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
        <metric-offset>1</metric-offset> <!-- operation="delete"-->
      </config>
    </interface>
  </interfaces>
</ripng>
```

### Command Syntax

```
ipv6 rip metric-offset <1-16>
```

---

## Configure ripng enabled

Use this attribute to enable the router instance

Attribute Name: ripng-enabled

Attribute Type: uint8

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
      </ripng-enabled>
    </config>
  </instance>
</ripng>
```

### Command Syntax

```
router ipv6 rip
```

---

## Configure enable cisco metric behavior

Use this attribute to enable the metric update consistent with Cisco

Attribute Name: enable-cisco-metric-behavior

Attribute Type: boolean

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
      <enable-cisco-metric-behavior>true</enable-cisco-metric-behavior> <!--
operation="delete"-->
    </config>
  </instance>
</ripng>
```

### Command Syntax

```
cisco-metric-behavior enable
```

---

## Configure passive interfaces

Use this attribute to block RIP broadcast on the interface

Attribute Name: passive-interfaces

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
```



```
<passive-interfaces>IFNAME</passive-interfaces> <!-- operation="delete"-->
</config>
</instance>
</ripng>
```

## Command Syntax

```
passive-interface IFNAME
```

---

## Configure distance

Use this attribute to set the administrative distance. The administrative distance is a feature used by the routers to select the path when there are two or more different routes to the same destination from two different routing protocols. A smaller administrative distance indicating a more reliable protocol

Attribute Name: distance

Attribute Type: uint8

Default Value: 120

Attribute Range: 1-255

## Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
      <distance>1</distance> <!-- operation="delete"-->
    </config>
  </instance>
</ripng>
```

## Command Syntax

```
distance <1-255>
```

---

## Configure static routes

Use this attribute to configure static RIP routes

Attribute Name: static-routes

Attribute Type: string

## Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
      <static-routes>X:X::X:X/M</static-routes> <!-- operation="delete"-->
    </config>
  </instance>
</ripng>
```

## Command Syntax

```
route X:X::X:X/M
```

---

## Configure aggregate prefixes

Use this attribute to configure aggregate prefixes

Attribute Name: aggregate-prefixes

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
      <aggregate-prefixes>X:X::X:X/M</aggregate-prefixes> <!-- operation="delete"-->
    </config>
  </instance>
</ripng>
```

### Command Syntax

```
aggregate-address X:X::X:X/M
```

---

## Configure default metric

Use this attribute to specify the metrics to be assigned to redistributed routers

Attribute Name: default-metric

Attribute Type: uint8

Default Value: 1

Attribute Range: 1-15

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <config>
      <default-metric>1</default-metric> <!-- operation="delete"-->
    </config>
  </instance>
</ripng>
```

### Command Syntax

```
default-metric <1-15>
```

---

## Configure originate default route

Use this attribute to add default routes to the RIP updates

Attribute Name: originate-default-route

Attribute Type: empty

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
```

```

<instance>
<config>
  </originate-default-route><!-- operation="delete"-->
</config>
</instance>
</ripng>

```

## Command Syntax

```
default-information originate
```

---

## Configure receive buffer size

Use this attribute to run-time configure the RIP UDP receive-buffer size

Attribute Name: receive-buffer-size

Attribute Type: uint32

Default Value: 8192

Attribute Range: 8192-2147483647

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
<instance>
<config>
  <receive-buffer-size>8192</receive-buffer-size> <!-- operation="delete"-->
</config>
</instance>
</ripng>

```

## Command Syntax

```
recv-buffer-size <8192-2147483647>
```

---

## Configure route type

Use this attribute to redistribute information from other routing protocols

Attribute Name: route-type

Attribute Type: enum (kernel|connected|static|ospf6|isis|bgp)

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
<instance>
<redistribute-policies>
<redistribute-policy> <!-- operation="delete"-->
  <route-type>kernel</route-type>
<config>
  <route-type>kernel</route-type>
</config>
</redistribute-policy>
</redistribute-policies>

```

```
</instance>  
</ripng>
```

## Command Syntax

```
redistribute (kernel|connected|static|ospf6|isis|bgp)
```

---

## Configure route map

Use this attribute to redistribute route-map from other routing protocols

Attribute Name: route-map

Attribute Type: string

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

## Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">  
  <instance>  
    <redistribute-policies>  
      <redistribute-policy>  
        <route-type>kernel</route-type>  
        <config>  
          <route-type>kernel</route-type>  
          <metric>0</metric>  
        </config>  
        <route-map>WORD</route-map>  
      </redistribute-policy>  
    </redistribute-policies>  
  </instance>  
</ripng>
```

## Command Syntax

```
redistribute (kernel|connected|static|ospf6|isis|bgp) metric <0-16> route-map WORD
```

---

## Configure metric

Use this attribute to redistribute metric information from other routing protocols

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

## Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">  
  <instance>  
    <redistribute-policies>  
      <redistribute-policy>
```

```

    <route-type>kernel</route-type>
  </config>
  <route-type>kernel</route-type>
</config>
<metric>0</metric>
</redistribute-policy>
</redistribute-policies>
</instance>
</ripng>

```

## Command Syntax

```
redistribute (kernel|connected|static|ospf6|isis|bgp) metric <0-16>
```

---

## Configure route table update interval

Use this attribute to adjust basic routing protocol update timer interval

Attribute Name: route-table-update-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

Attribute Name: route-info-timeout-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

Attribute Name: garbage-collection-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <timers>
      <config>
        <route-info-timeout-interval>5</route-info-timeout-interval>
        <garbage-collection-interval>5</garbage-collection-interval>
        <route-table-update-interval>5</route-table-update-interval>
      </config>
    </timers>
  </instance>
</ripng>

```

## Command Syntax

```
timers basic <5-2147483647> <5-2147483647> <5-2147483647>
```

---

## Configure address

Use this attribute to specify a link local address of neighbor router. It is used for each connected point-to-point link. This command exchanges non-broadcast routing information. It can be used multiple times for additional neighbors

Attribute Name: address

Attribute Type: inet:ipv6-address

Attribute Name: if-name

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <neighbors>
      <neighbor> <!-- operation="delete"-->
        <address>X:X::X:X</address>
        <config>
          <address>X:X::X:X</address>
          <if-name>IFNAME</if-name>
        </config>
      </neighbor>
    </neighbors>
  </instance>
</ripng>
```

### Command Syntax

```
neighbor X:X::X:X IFNAME
```

---

## Configure type

Use this attribute to decide the type of packets to which the filtering is applied

Attribute Name: type

Attribute Type: enum (in|out)

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <interfaces>
      <interface>
        <name>IFNAME</name>
        <config>
          <name>WORD</name>
        </config>
      </interface>
    </interfaces>
    <filtering-route-maps>
      <filtering-route-map>
        <type>in</type>
        <config>
          <type>in</type>
          <route-map-name>WORD</route-map-name>
        </config>
      </filtering-route-map>
    </filtering-route-maps>
  </instance>
</ripng>
```

```

    </config>
  </filtering-route-map>
</filtering-route-maps>
</interface>
</interfaces>
</instance>
</ripng>

```

## Command Syntax

```
route-map WORD (in|out) IFNAME
```

---

## Configure access list name

This attribute describes the metric used for offset list

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

Attribute Name: access-list-name

Attribute Type: string

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <interfaces>
      <interface>
        <name>IFNAME</name>
        <config>
          <name>WORD</name>
        </config>
      </interface>
    </interfaces>
    <offset-lists>
      <offset-list>
        <direction>in</direction>
        <config>
          <direction>in</direction>
          <access-list-name>WORD</access-list-name>
        </config>
        <metric>0</metric>
      </offset-list>
    </offset-lists>
  </instance>
</ripng>

```

## Command Syntax

```
offset-list WORD (in|out) <0-16> IFNAME
```

---

## Configure direction

Use this attribute to decide the type of packets to which the distribute list is applied

Attribute Name: direction

Attribute Type: enum (in|out)

Attribute Name: access-list-name

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <interfaces>
      <interface>
        <name>IFNAME</name>
        <config>
          <name>WORD</name>
        </config>
      <distributed-lists>
      <distributed-list>
        <direction>in</direction>
        <config>
          <direction>in</direction>
          <access-list-name>WORD</access-list-name>
        </config>
      </distributed-list>
    </distributed-lists>
  </interface>
</interfaces>
</instance>
</ripng>
```

### Command Syntax

```
distribute-list WORD (in|out) IFNAME
```

---

## Configure list name

Use this attribute to decide the type of packets to which the distribute list prefix is applied

Attribute Name: direction

Attribute Type: enum (in|out)

Attribute Name: list-name

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <interfaces>
```



```

<interface>
  <name>IFNAME</name>
  <config>
    <name>WORD</name>
  </config>
<distributed-prefix-lists>
<distributed-prefix-list>
  <direction>in</direction>
  <config>
    <direction>in</direction>
    <list-name>WORD</list-name>
  </config>
</distributed-prefix-list>
</distributed-prefix-lists>
</interface>
</interfaces>
</instance>
</ripng>

```

### Command Syntax

```
distributed-list prefix WORD (in|out) IFNAME
```

---

## debug ipv6 rip (all|events|packet send|packet rcv|packet|packet detail|nsm|rib)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet send|packet rcv|packet|packet detail|nsm|rib)

### Netconf RPC payload

```

<ripng-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <terminal-debug-options>all</terminal-debug-options>
</ripng-terminal-debug-on>

```

### Command Syntax

```
debug ipv6 rip (all|events|packet send|packet rcv|packet|packet detail|nsm|rib)
```

---

## no debug ipv6 rip (all|events|packet send|packet rcv|packet|packet detail|nsm|rib)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|events|packet send|packet rcv|packet|packet detail|nsm|rib)

### Netconf RPC payload

```

<ripng-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <terminal-debug-options>all</terminal-debug-options>
</ripng-terminal-debug-off>

```

---

## Command Syntax

```
no debug ipv6 rip (all|events|packet send|packet recv|packet|packet detail|nsm|rib)
```

---

## clear ipv6 rip route (kernel|connected|static|isis|ospf6|bgp|rip|all)

Attribute Name: type

Attribute Type: enum (kernel|connected|static|isis|ospf6|bgp|rip|all)

### Netconf RPC payload

```
<ripng-clear-route xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <type>kernel</type>
</ripng-clear-route>
```

---

## Command Syntax

```
clear ipv6 rip route (kernel|connected|static|isis|ospf6|bgp|rip|all)
```

---

## clear ipv6 rip route X:X::X:X/M

Attribute Name: prefix

Attribute Type: string

### Netconf RPC payload

```
<ripng-clear-route-prefix xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <prefix>X:X::X:X/M</prefix>
</ripng-clear-route-prefix>
```

---

## Command Syntax

```
clear ipv6 rip route X:X::X:X/M
```

---

# IPI-RIPNG-VRF

---

## Configure vrf name

VRF Name

Attribute Name: vrf-name

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf <!-- operation="delete"-->
        <vrf-name>NAME</vrf-name>
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

```

        <vrf-name>WORD</vrf-name>
    </config>
</vrf>
</vrfs>
</instance>
</ripng>

```

## Command Syntax

```
address-family ipv6 vrf NAME
```

---

## Configure enable cisco metric behavior

Use this attribute to enable the metric update consistent with Cisco

Attribute Name: enable-cisco-metric-behavior

Attribute Type: boolean

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <enable-cisco-metric-behavior>true</enable-cisco-metric-behavior> <!--
operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>

```

## Command Syntax

```
cisco-metric-behavior enable
```

---

## Configure passive interfaces

Use this attribute to block RIP broadcast on the interface

Attribute Name: passive-interfaces

Attribute Type: string

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>

```

```

        <vrf-name>WORD</vrf-name>
    </config>
    <passive-interfaces>IFNAME</passive-interfaces> <!-- operation="delete"-->
>
    </vrf>
</vrfs>
</instance>
</ripng>

```

## Command Syntax

```
passive-interface IFNAME
```

---

## Configure distance

Use this attribute to set the administrative distance. The administrative distance is a feature used by the routers to select the path when there are two or more different routes to the same destination from two different routing protocols. A smaller administrative distance indicating a more reliable protocol

Attribute Name: distance

Attribute Type: uint8

Default Value: 120

Attribute Range: 1-255

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <distance>1</distance> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>

```

## Command Syntax

```
distance <1-255>
```

---

## Configure static routes

Use this attribute to configure static RIP routes

Attribute Name: static-routes

Attribute Type: string

**Netconf edit-config payload**

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <static-routes>X:X::X:X/M</static-routes> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

**Command Syntax**

```
route X:X::X:X/M
```

---

**Configure aggregate prefixes**

Use this attribute to configure aggregate prefixes

Attribute Name: aggregate-prefixes

Attribute Type: string

**Netconf edit-config payload**

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <aggregate-prefixes>X:X::X:X/M</aggregate-prefixes> <!--
operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

**Command Syntax**

```
aggregate-address X:X::X:X/M
```

---

**Configure default metric**

Use this attribute to specify the metrics to be assigned to redistributed routers

Attribute Name: default-metric

Attribute Type: uint8

Default Value: 1

Attribute Range: 1-15

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <default-metric>1</default-metric> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

### Command Syntax

```
default-metric <1-15>
```

---

## Configure originate default route

Use this attribute to add default routes to the RIP updates

Attribute Name: originate-default-route

Attribute Type: empty

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        </originate-default-route><!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

### Command Syntax

```
default-information originate
```

---

## Configure receive buffer size

Use this attribute to run-time configure the RIP UDP receive-buffer size

Attribute Name: receive-buffer-size

Attribute Type: uint32

Default Value: 8192

Attribute Range: 8192-2147483647

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <receive-buffer-size>8192</receive-buffer-size> <!-- operation="delete"-->
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

### Command Syntax

```
recv-buffer-size <8192-2147483647>
```

---

## Configure route type

Use this attribute to redistribute information from other routing protocols

Attribute Name: route-type

Attribute Type: enum (connected|static|ospf6|bgp)

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <redistribute-policies>
          <redistribute-policy> <!-- operation="delete"-->
            <route-type>connected</route-type>
            <config>
              <route-type>connected</route-type>
            </config>
          </redistribute-policy>
        </redistribute-policies>
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

```

</vrfs>
</instance>
</ripng>

```

## Command Syntax

```
redistribute (connected|static|ospf6|bgp)
```

---

## Configure route map

Use this attribute to redistribute route-map from other routing protocols

Attribute Name: route-map

Attribute Type: string

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <redistribute-policies>
          <redistribute-policy>
            <route-type>connected</route-type>
            <config>
              <route-type>connected</route-type>
              <metric>0</metric>
            </config>
            <route-map>WORD</route-map>
          </redistribute-policy>
        </redistribute-policies>
      </vrf>
    </vrfs>
  </instance>
</ripng>

```

## Command Syntax

```
redistribute (connected|static|ospf6|bgp) metric <0-16> route-map WORD
```

---

## Configure metric

Use this attribute to redistribute metric information from other routing protocols

Attribute Name: metric



Attribute Type: uint8

Attribute Range: 0-16

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <redistribute-policies>
          <redistribute-policy>
            <route-type>connected</route-type>
            <config>
              <route-type>connected</route-type>
            </config>
            <metric>0</metric>
          </redistribute-policy>
        </redistribute-policies>
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

### Command Syntax

```
redistribute (connected|static|ospf6|bgp) metric <0-16>
```

---

## Configure route table update interval

Use this attribute to adjust basic routing protocol update timer interval

Attribute Name: route-table-update-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

Attribute Name: route-info-timeout-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

Attribute Name: garbage-collection-interval

Attribute Type: uint32

Attribute Range: 5-2147483647

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
```

```

    <vrf>
      <vrf-name>NAME</vrf-name>
      <config>
        <vrf-name>WORD</vrf-name>
      </config>
      <timers>
        <config>
          <route-info-timeout-interval>5</route-info-timeout-interval>
          <garbage-collection-interval>5</garbage-collection-interval>
          <route-table-update-interval>5</route-table-update-interval>
        </config>
      </timers>
    </vrf>
  </vrfs>
</instance>
</ripng>

```

## Command Syntax

```
timers basic <5-2147483647> <5-2147483647> <5-2147483647>
```

## Configure address

Use this attribute to specify a link local address of neighbor router. It is used for each connected point-to-point link. This command exchanges non-broadcast routing information. It can be used multiple times for additional neighbors

Attribute Name: address

Attribute Type: inet:ipv6-address

Attribute Name: if-name

Attribute Type: string

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <neighbors>
          <neighbor> <!-- operation="delete"-->
            <address>X:X::X:X</address>
            <config>
              <address>X:X::X:X</address>
              <if-name>IFNAME</if-name>
            </config>
          </neighbor>
        </neighbors>
      </vrf>
    </instance>
  </ripng>

```

```

</vrfs>
</instance>
</ripng>

```

## Command Syntax

```
neighbor X:X::X:X IFNAME
```

---

## Configure type

Use this attribute to decide the type of packets to which the filtering is applied

Attribute Name: type

Attribute Type: enum (in|out)

Attribute Name: route-map-name

Attribute Type: string

Attribute Range: 1-63

## Netconf edit-config payload

```

<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <interfaces>
          <interface>
            <name>IFNAME</name>
            <config>
              <name>WORD</name>
            </config>
            <filtering-route-maps>
              <filtering-route-map>
                <type>in</type>
                <config>
                  <type>in</type>
                  <route-map-name>WORD</route-map-name>
                </config>
              </filtering-route-map>
            </filtering-route-maps>
          </interface>
        </interfaces>
      </vrf>
    </vrfs>
  </instance>
</ripng>

```

## Command Syntax

```
route-map WORD (in|out) IFNAME
```

---

## Configure access list name

This attribute describes the metric used for offset list

Attribute Name: metric

Attribute Type: uint8

Attribute Range: 0-16

Attribute Name: access-list-name

Attribute Type: string

## Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <interfaces>
          <interface>
            <name>IFNAME</name>
            <config>
              <name>WORD</name>
            </config>
            <offset-lists>
              <offset-list>
                <direction>in</direction>
                <config>
                  <direction>in</direction>
                  <access-list-name>WORD</access-list-name>
                </config>
                <metric>0</metric>
              </offset-list>
            </offset-lists>
          </interface>
        </interfaces>
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

## Command Syntax

```
offset-list WORD (in|out) <0-16> IFNAME
```

---

## Configure direction

Use this attribute to decide the type of packets to which the distribute list is applied

Attribute Name: direction

Attribute Type: enum (in|out)

Attribute Name: access-list-name

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <interfaces>
          <interface>
            <name>IFNAME</name>
            <config>
              <name>WORD</name>
            </config>
            <distribute-lists>
              <distribute-list>
                <direction>in</direction>
                <config>
                  <direction>in</direction>
                  <access-list-name>WORD</access-list-name>
                </config>
              </distribute-list>
            </distribute-lists>
          </interface>
        </interfaces>
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

### Command Syntax

```
distribute-list WORD (in|out) IFNAME
```

---

## Configure list name

Use this attribute to decide the type of packets to which the distribute list prefix is applied

Attribute Name: direction

Attribute Type: enum (in|out)

Attribute Name: list-name

Attribute Type: string

### Netconf edit-config payload

```
<ripng xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ripng">
  <instance>
    <vrfs>
      <vrf>
        <vrf-name>NAME</vrf-name>
        <config>
          <vrf-name>WORD</vrf-name>
        </config>
        <interfaces>
          <interface>
            <name>IFNAME</name>
            <config>
              <name>WORD</name>
            </config>
            <distribute-prefix-lists>
              <distribute-prefix-list>
                <direction>in</direction>
                <config>
                  <direction>in</direction>
                  <list-name>WORD</list-name>
                </config>
              </distribute-prefix-list>
            </distribute-prefix-lists>
          </interface>
        </interfaces>
      </vrf>
    </vrfs>
  </instance>
</ripng>
```

### Command Syntax

```
distribute-list prefix WORD (in|out) IFNAME
```

---

## IPI-ARP

---

### Configure ip address

Use this attribute to create a static ARP entry

Attribute Name: ip-address

Attribute Type: inet:ipv4-address

Attribute Name: mac-address

Attribute Type: string

**Netconf edit-config payload**

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <entries>
    <entry> <!-- operation="delete"-->
      <ip-address>A.B.C.D</ip-address>
      <config>
        <ip-address>A.B.C.D</ip-address>
        <vrf-name>NAME</vrf-name>
        <mac-address>XXXX.XXXX.XXXX</mac-address>
      </config>
      <vrf-name>NAME</vrf-name>
    </entry>
  </entries>
</arp>
```

**Command Syntax**

```
ip arp (vrf NAME|) A.B.C.D XXXX.XXXX.XXXX
```

---

**Configure respond to arp request**

Use this attribute to set the response to ARP requests for the IP address

Attribute Name: respond-to-arp-request

Attribute Type: empty

Attribute Name: mac-address

Attribute Type: string

**Netconf edit-config payload**

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <entries>
    <entry>
      <ip-address>A.B.C.D</ip-address>
      <config>
        <ip-address>A.B.C.D</ip-address>
        <vrf-name>NAME</vrf-name>
        <mac-address>XXXX.XXXX.XXXX</mac-address>
      </config>
      <vrf-name>NAME</vrf-name>
      </respond-to-arp-request>
    </entry>
  </entries>
</arp>
```

**Command Syntax**

```
ip arp (vrf NAME|) A.B.C.D XXXX.XXXX.XXXX alias
```

---

**Configure enable**

Enable/Disable arp event debug

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <debug>
  <config>
    </enable><!-- operation="delete"-->
  </config>
</debug>
</arp>
```

### Command Syntax

```
debug ip arp event
```

---

## Configure enable proxy arp

Use this attribute to enable the proxy ARP feature

Attribute Name: enable-proxy-arp

Attribute Type: empty

### Netconf edit-config payload

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <interfaces>
  <interface>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
    </enable-proxy-arp><!-- operation="delete"-->
  </interface>
</interfaces>
</arp>
```

### Command Syntax

```
ip proxy-arp
```

---

## Configure enable local proxy arp

Use this attribute to enable the local proxy ARP feature

Attribute Name: enable-local-proxy-arp

Attribute Type: empty

### Netconf edit-config payload

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <interfaces>
  <interface>
```



```
<name>WORD</name>
<config>
  <name>WORD</name>
</config>
</enable-local-proxy-arp><!-- operation="delete"-->
</interface>
</interfaces>
</arp>
```

### Command Syntax

```
ip local-proxy-arp
```

---

## Configure enable ip redirects

Use this attribute to enable ICMP redirects in kernel

Attribute Name: enable-ip-redirects

Attribute Type: empty

### Netconf edit-config payload

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </enable-ip-redirects><!-- operation="delete"-->
</interface>
</interfaces>
</arp>
```

### Command Syntax

```
ip redirects
```

---

## Configure arp ageing timeout

Use this attribute to set the ARP aging timeout. The bridge aging time affects the ARP entries which are dependent upon the MAC addresses in hardware. If a MAC address ages out, it causes the corresponding ARP entry to refresh.

Attribute Name: arp-ageing-timeout

Attribute Type: uint16

Default Value: 1500

Attribute Range: 60-36000

### Netconf edit-config payload

```
<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
<interfaces>
<interface>
```

```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <arp-ageing-timeout>60</arp-ageing-timeout> <!-- operation="delete"-->
</interface>
</interfaces>
</arp>

```

### Command Syntax

```
arp-ageing-timeout <60-36000>
```

---

## Configure arp reachable time

Use this attribute to set the ARP reachable time.

Attribute Name: arp-reachable-time

Attribute Type: uint16

Default Value: 60

Attribute Range: 10-36000

### Netconf edit-config payload

```

<arp xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <arp-reachable-time>10</arp-reachable-time> <!-- operation="delete"-->
    </interface>
  </interfaces>
</arp>

```

### Command Syntax

```
arp-reachable-time <10-36000>
```

---

## debug ip arp event

### Netconf RPC payload

```
<arp-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp"/>
```

### Command Syntax

```
debug ip arp event
```

---

## no debug ip arp event

### Netconf RPC payload

```
<arp-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp"/>
```

### Command Syntax

```
no debug ip arp event
```

---

## clear arp (A.B.C.D|) (vrf (all|VRFNAME|default)|)

Attribute Name: ip-address

Attribute Type: inet:ipv4-address

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-arp-entry xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-arp">
  <ip-address>A.B.C.D</ip-address>
  <vrf-name>all</vrf-name>
</clear-arp-entry>
```

### Command Syntax

```
clear arp (A.B.C.D|) (vrf (all|VRFNAME|default)|)
```

---

## clear arp IFNAME (vrf (all|VRFNAME|default)|)

Attribute Name: if-name

Attribute Type: string

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-arp-entry-per-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
arp">
  <if-name>IFNAME</if-name>
  <vrf-name>all</vrf-name>
</clear-arp-entry-per-interface>
```

### Command Syntax

```
clear arp IFNAME (vrf (all|VRFNAME|default)|)
```

---

## IPI-NEIGHBOR-DISCOVERY

---

### Configure interface name

Use this attribute to add a static neighbor entry of the interface name

Attribute Name: interface-name

Attribute Type: string

Attribute Name: mac-address

Attribute Type: string

### Netconf edit-config payload

```
<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <entries>
    <entry> <!-- operation="delete"-->
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>IFNAME</interface-name>
        <ipv6-address>X:X::X:X</ipv6-address>
        <mac-address>XXXX.XXXX.XXXX</mac-address>
      </config>
      <ipv6-address>X:X::X:X</ipv6-address>
    </entry>
  </entries>
</neighbor-discovery>
```

### Command Syntax

```
ipv6 neighbor X:X::X:X IFNAME XXXX.XXXX.XXXX
```

---

### Configure ipv6 address

Use this attribute to add a static neighbor entry of the interface name

Attribute Name: interface-name

Attribute Type: string

### Netconf edit-config payload

```
<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <entries>
    <entry>
      <interface-name>IFNAME</interface-name>
      <config>
        <interface-name>IFNAME</interface-name>
        <ipv6-address>X:X::X:X</ipv6-address>
      </config>
      <ipv6-address>X:X::X:X</ipv6-address>
    </entry>
  </entries>
</neighbor-discovery>
```

```

</entry>
</entries>
</neighbor-discovery>

```

## Command Syntax

```
ipv6 neighbor X:X::X:X IFNAME IFNAME
```

---

## Configure enable

Use this attribute to enable debugging for neighbor events.

Attribute Name: enable

Attribute Type: empty

## Netconf edit-config payload

```

<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</neighbor-discovery>

```

## Command Syntax

```
debug ipv6 nd event
```

---

## Configure nd ageing timeout

Use this attribute to set the neighbor ageing timeout value.

Attribute Name: nd-ageing-timeout

Attribute Type: uint16

Default Value: 1500

Attribute Range: 60-36000

## Netconf edit-config payload

```

<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
        </config>
        <nd-ageing-timeout>60</nd-ageing-timeout> <!-- operation="delete"-->
      </interface>
    </interfaces>
  </neighbor-discovery>

```

---

## Command Syntax

```
nd-ageing-timeout <60-36000>
```

---

## Configure nd reachable time

Use this attribute to set neighbor reachable time value.

Attribute Name: nd-reachable-time

Attribute Type: uint32

Default Value: 60

Attribute Range: 10-36000

### Netconf edit-config payload

```
<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <nd-reachable-time>10</nd-reachable-time> <!-- operation="delete"-->
    </interface>
  </interfaces>
</neighbor-discovery>
```

## Command Syntax

```
nd-reachable-time <10-36000>
```

---

## Configure no ip unreachable

Use this attribute to set ip unreachable.

Attribute Name: no-ip-unreachable

Attribute Type: empty

### Netconf edit-config payload

```
<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </no-ip-unreachable><!-- operation="delete"-->
    </interface>
  </interfaces>
</neighbor-discovery>
```

---

## Command Syntax

```
no ip unreachable
```

---

## Configure no ipv6 unreachable

Use this attribute to set ipv6 unreachable.

Attribute Name: no-ipv6-unreachable

Attribute Type: empty

### Netconf edit-config payload

```
<neighbor-discovery xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </no-ipv6-unreachable><!-- operation="delete"-->
    </interface>
  </interfaces>
</neighbor-discovery>
```

## Command Syntax

```
no ipv6 unreachable
```

---

## debug ipv6 nd event

### Netconf RPC payload

```
<nd-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery"/>
```

## Command Syntax

```
debug ipv6 nd event
```

---

## no debug ipv6 nd event

### Netconf RPC payload

```
<nd-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery"/>
```

## Command Syntax

```
no debug ipv6 nd event
```

---

## clear ipv6 neighbors (X:X::X:X/M|) (vrf (all|VRFNAME|default|))

Attribute Name: ipv6-address

Attribute Type: string

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv6-nd-entry xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-neighbor-
discovery">
  <ipv6-address>X:X::X:X/M</ipv6-address>
  <vrf-name>all</vrf-name>
</clear-ipv6-nd-entry>
```

### Command Syntax

```
clear ipv6 neighbors (X:X::X:X/M|) (vrf (all|VRFNAME|default)|)
```

---

## clear ipv6 neighbors IFNAME (vrf (all|VRFNAME|default)|)

Attribute Name: if-name

Attribute Type: string

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-ipv6-nd-entry-per-interface xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-neighbor-discovery">
  <if-name>IFNAME</if-name>
  <vrf-name>all</vrf-name>
</clear-ipv6-nd-entry-per-interface>
```

### Command Syntax

```
clear ipv6 neighbors IFNAME (vrf (all|VRFNAME|default)|)
```

---

## IPI-USER-SESSION-MANAGEMENT

---

### Configure console id

Attribute used to set line console identification.

Attribute Name: console-id

Attribute Type: enum (0)

### Netconf edit-config payload

```
<user-session xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-console>
    <console> <!-- operation="delete"-->
      <console-id>0</console-id>
```



```
<config>
  <console-id>0</console-id>
</config>
</console>
</line-console>
</user-session>
```

### Command Syntax

```
line console <0-0>
```

---

## Configure privilege level

Attribute used to set line privilege level.

Attribute Name: privilege-level

Attribute Type: uint8

Attribute Range: 1-16

### Netconf edit-config payload

```
<user-session xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-console>
    <console>
      <console-id>0</console-id>
      <config>
        <console-id>0</console-id>
      </config>
      <privilege-level>1</privilege-level> <!-- operation="delete"-->
    </console>
  </line-console>
</user-session>
```

### Command Syntax

```
privilege level <1-16>
```

---

## Configure command history max limit

Attribute used to set line maximum limit to history commands.

Attribute Name: command-history-max-limit

Attribute Type: uint32

Attribute Range: 0-2147483647

### Netconf edit-config payload

```
<user-session xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-console>
    <console>
      <console-id>0</console-id>
      <config>
```

```

        <console-id>0</console-id>
    </config>
    <command-history-max-limit>0</command-history-max-limit> <!--
operation="delete"-->
</console>
</line-console>
</user-session>

```

## Command Syntax

```
history max <0-2147483647>
```

---

## Configure seconds

Attribute used to set line timeout in seconds. The default is 0.

Attribute Name: seconds

Attribute Type: uint32

Attribute Range: 0-2147483

Attribute Name: minutes

Attribute Type: uint32

Attribute Range: 0-35791

## Netconf edit-config payload

```

<user-session xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-console>
    <console>
      <console-id>0</console-id>
      <config>
        <console-id>0</console-id>
      </config>
    <timeout>
      <config>
        <minutes>0</minutes> <!-- operation="delete"-->
        <seconds>0</seconds> <!-- operation="delete"-->
      </config>
    </timeout>
  </console>
</line-console>
</user-session>

```

## Command Syntax

```
exec-timeout <0-35791> <0-2147483>
```

---

## Configure minutes

Attribute used to set line timeout in minutes. The default is 10 minutes.

Attribute Name: minutes

Attribute Type: uint32

Attribute Range: 0-35791

### Netconf edit-config payload

```
<user-session xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-console>
    <console>
      <console-id>0</console-id>
      <config>
        <console-id>0</console-id>
      </config>
    </console>
  </line-console>
</user-session>
```

### Command Syntax

```
exec-timeout <0-35791>
```

---

## Configure vty id

Attribute used to set line privilege level.

Attribute Name: privilege-level

Attribute Type: uint8

Attribute Range: 1-16

### Netconf edit-config payload

```
<user-session xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-vty>
    <vtty>
      <vtty-id>0</vtty-id>
      <config>
        <vtty-id>0</vtty-id>
      </config>
      <privilege-level>1</privilege-level> <!-- operation="delete"-->
    </vtty>
  </line-vty>
</user-session>
```

### Command Syntax

```
privilege level <1-16>
```

---

## clear line WORD

Attribute Name: line-name

Attribute Type: string

Attribute Range: 1-64

### Netconf RPC payload

```
<clear-line xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-session-
management">
  <line-name>WORD</line-name>
</clear-line>
```

### Command Syntax

```
clear line WORD
```

---

## mem-info imi monitor-start

Attribute Name: mem-info-imi

Attribute Type: boolean

### Netconf RPC payload

```
<mem-info-monitor-start xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-
session-management">
  <mem-info-imi>true</mem-info-imi/>
</mem-info-monitor-start>
```

### Command Syntax

```
mem-info imi monitor-start
```

---

## mem-info imi monitor-stop

Attribute Name: mem-info-imi

Attribute Type: boolean

### Netconf RPC payload

```
<mem-info-monitor-stop xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-user-
session-management">
  <mem-info-imi>true</mem-info-imi/>
</mem-info-monitor-stop>
```

### Command Syntax

```
mem-info imi monitor-stop
```

---

## IPI-IPV6-ROUTER-ADV

---

### Configure suppress ra

Use this attribute to suppress IPv6 Router Advertisements

Attribute Name: suppress-ra

Attribute Type: uint8

#### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </suppress-ra><!-- operation="delete"-->
    </interface>
  </interfaces>
</router-advertisement>
```

#### Command Syntax

```
ipv6 nd suppress-ra
```

---

### Configure suppress ra mtu

Use this attribute to disable sending MTU in Router Advertisement messages

Attribute Name: suppress-ra-mtu

Attribute Type: uint8

#### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </suppress-ra-mtu><!-- operation="delete"-->
    </interface>
  </interfaces>
</router-advertisement>
```

## Command Syntax

```
ipv6 nd suppress-ra mtu
```

---

## Configure managed flag

Use this attribute to use DHCP for address config by host

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: managed-flag

Attribute Type: empty

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </managed-flag><!-- operation="delete"-->
    </interface>
  </interfaces>
</router-advertisement>
```

## Command Syntax

```
ipv6 nd managed-config-flag
```

---

## Configure other config flag

Use this attribute to use DHCP for non-address config by host

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: other-config-flag

Attribute Type: empty

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </other-config-flag><!-- operation="delete"-->
    </interface>
  </interfaces>
</router-advertisement>
```

## Command Syntax

```
ipv6 nd other-config-flag
```

---

## Configure current hop limit

Use this attribute to set advertised current hop limit

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: current-hop-limit

Attribute Type: uint8

Default Value: 64

Attribute Range: 0-255

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <current-hop-limit>0</current-hop-limit> <!-- operation="delete"-->
    </interface>
  </interfaces>
</router-advertisement>
```

## Command Syntax

```
ipv6 nd current-hoplimit <0-255>
```

---

## Configure link mtu

Use this attribute to set advertised link-mtu option

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: link-mtu

Attribute Type: uint32

Default Value: 1500

Attribute Range: 1280-65535

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
</router-advertisement>
```

```

    </config>
    <link-mtu>1280</link-mtu> <!-- operation="delete"-->
</interface>
</interfaces>
</router-advertisement>

```

## Command Syntax

```
ipv6 nd link-mtu <1280-65535>
```

---

## Configure dad attempts

Use this attribute to set number of attempts for duplicate address detection

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: dad-attempts

Attribute Type: uint16

Default Value: 1

Attribute Range: 0-600

## Netconf edit-config payload

```

<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-
adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <dad-attempts>0</dad-attempts> <!-- operation="delete"-->
    </interface>
  </interfaces>
</router-advertisement>

```

## Command Syntax

```
ipv6 nd dad attempts <0-600>
```

---

## Configure off link

The IPV6 Router Advertisement prefix off-link flag

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: off-link

Attribute Type: empty

## Netconf edit-config payload

```

<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-
adv">
  <interfaces>
    <interface>

```



```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<ipv6-prefixes>
<config>
  </off-link><!-- operation="delete"-->
</config>
</ipv6-prefixes>
</interface>
</interfaces>
</router-advertisement>

```

### Command Syntax

```
ipv6 nd prefix offlink
```

---

## Configure no auto configuration

The IPV6 Router Advertisement prefix no auto-configuration flag

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: no-auto-configuration

Attribute Type: empty

### Netconf edit-config payload

```

<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <ipv6-prefixes>
      <config>
        </no-auto-configuration><!-- operation="delete"-->
      </config>
    </ipv6-prefixes>
  </interface>
</interfaces>
</router-advertisement>

```

### Command Syntax

```
ipv6 nd prefix no-autoconf
```

---

## Configure valid lifetime

The IPV6 Router Advertisement prefix valid lifetime

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: valid-lifetime

Attribute Type: uint32

Default Value: 2592000

Attribute Range: 0-4294967295

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <ipv6-prefixes>
      <config>
        <valid-lifetime>0</valid-lifetime> <!-- operation="delete"-->
      </config>
    </ipv6-prefixes>
  </interface>
</interfaces>
</router-advertisement>
```

### Command Syntax

```
ipv6 nd prefix valid-lifetime <0-4294967295>
```

---

## Configure preferred lifetime

The IPV6 Router Advertisement prefix preferred lifetime

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: preferred-lifetime

Attribute Type: uint32

Default Value: 604800

Attribute Range: 0-4294967295

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <ipv6-prefixes>
      <config>
        <preferred-lifetime>0</preferred-lifetime> <!-- operation="delete"-->
      </config>
    </ipv6-prefixes>
  </interface>
</interfaces>
</router-advertisement>
```

```

</config>
</ipv6-prefixes>
</interface>
</interfaces>
</router-advertisement>

```

## Command Syntax

```
ipv6 nd prefix preferred-lifetime <0-4294967295>
```

---

## Configure ipv6 address

The IPV6 Router Advertisement prefix address

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: ipv6-address

Attribute Type: string

## Netconf edit-config payload

```

<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-
adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <ipv6-prefixes>
    <ipv6-prefix> <!-- operation="delete"-->
      <ipv6-address>X:X::X:X/M</ipv6-address>
      <config>
        <ipv6-address>X:X::X:X/M</ipv6-address>
      </config>
    </ipv6-prefix>
  </ipv6-prefixes>
</router-advertisement>

```

## Command Syntax

```
ipv6 nd prefix X:X::X:X/M
```

---

## Configure name

The IPV6 Router Advertisement prefix address preferred lifetime

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: preferred-lifetime

Attribute Type: uint32

Default Value: 604800

Attribute Range: 0-4294967295

Attribute Name: valid-lifetime

Attribute Type: uint32

Default Value: 2592000

Attribute Range: 0-4294967295

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    <ipv6-prefixes>
      <ipv6-prefix>
        <ipv6-address>X:X::X:X/M</ipv6-address>
        <config>
          <ipv6-address>X:X::X:X/M</ipv6-address>
          <valid-lifetime>0</valid-lifetime>
        </config>
        <preferred-lifetime>0</preferred-lifetime>
      </ipv6-prefix>
    </ipv6-prefixes>
  </interface>
</interfaces>
</router-advertisement>
```

### Command Syntax

```
ipv6 nd prefix X:X::X:X/M <0-4294967295> <0-4294967295>
```

---

## Configure reachable time

Use this attribute to set advertised reachability time

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: reachable-time

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-3600000

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
```

```

    <config>
      <name>WORD</name>
    </config>
  </timers>
</config>
</timers>
</interface>
</interfaces>
</router-advertisement>

```

### Command Syntax

```
ipv6 nd reachable-time <0-3600000>
```

---

## Configure retransmission time

Use this attribute to set advertised retransmission timer

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: retransmission-time

Attribute Type: uint32

Default Value: 0

Attribute Range: 0-4294967295

### Netconf edit-config payload

```

<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <timers>
    <config>
      <retransmission-time>0</retransmission-time> <!-- operation="delete"-->
    </config>
  </timers>
</router-advertisement>

```

### Command Syntax

```
ipv6 nd retransmission-time <0-4294967295>
```

---

## Configure router lifetime

Use this attribute to set IPv6 router advertisement lifetime

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: router-lifetime

Attribute Type: uint16

Default Value: 1800

Attribute Range: 0-9000

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
  <timers>
    <config>
      <router-lifetime>0</router-lifetime> <!-- operation="delete"-->
    </config>
  </timers>
</router-advertisement>
```

### Command Syntax

```
ipv6 nd ra-lifetime <0-9000>
```

---

## Configure max ra interval

Use this attribute to set maximum IPv6 router advertisement interval (min-ra-interval must be no greater than 0.75\*max-ra-interval)

This command is supported when following feature are enabled IPv6 Router Advertisement

Attribute Name: max-ra-interval

Attribute Type: uint32

Attribute Range: 4-1800

Attribute Name: min-ra-interval

Attribute Type: uint32

Attribute Range: 3-1350

### Netconf edit-config payload

```
<router-advertisement xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipv6-router-adv">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
```

```

        <name>WORD</name>
    </config>
<timers>
<ra-interval>
<config>
    <min-ra-interval>3</min-ra-interval>
    <max-ra-interval>4</max-ra-interval>
</config>
</ra-interval>
</timers>
</interface>
</interfaces>
</router-advertisement>

```

### Command Syntax

```
ipv6 nd ra-interval <4-1800> (<3-1350>|)
```

---

## IPI-ERPSV2

---

### Configure ring name

G.8032 ring name. This attribute uniquely identifies a ring on the network device.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: ring-name

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```

<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
<rings>
<ring> <!-- operation="delete"-->
    <ring-name>RINGNAME</ring-name>
    <config>
        <ring-name>RINGNAME</ring-name>
    </config>
</ring>
</rings>
</erpsv2>

```

### Command Syntax

```
g8032 ring RINGNAME
```

---

### Configure east interface

East port associated to the protection ring

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: east-interface

Attribute Type: string

Attribute Range: 1-33

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <rings>
    <ring>
      <ring-name>RINGNAME</ring-name>
      <config>
        <ring-name>RINGNAME</ring-name>
      </config>
      <east-interface>IFNAME</east-interface> <!-- operation="delete"-->
    </ring>
  </rings>
</erpsv2>
```

### Command Syntax

```
east-interface IFNAME
```

---

## Configure west interface

West port associated to the protection ring

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: west-interface

Attribute Type: string

Attribute Range: 1-33

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <rings>
    <ring>
      <ring-name>RINGNAME</ring-name>
      <config>
        <ring-name>RINGNAME</ring-name>
      </config>
      <west-interface>IFNAME</west-interface> <!-- operation="delete"-->
    </ring>
  </rings>
</erpsv2>
```

### Command Syntax

```
west-interface IFNAME
```

---

## Configure description

Textual description of the ring.



This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: description

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <rings>
    <ring>
      <ring-name>RINGNAME</ring-name>
      <config>
        <ring-name>RINGNAME</ring-name>
      </config>
      <description>1</description> <!-- operation="delete"-->
    </ring>
  </rings>
</erpsv2>
```

### Command Syntax

```
description LINE
```

---

## Configure profile name

G.8032 ring profile name

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: profile-name

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <profiles>
    <profile> <!-- operation="delete"-->
      <profile-name>PROFILENAME</profile-name>
      <config>
        <profile-name>PROFILENAME</profile-name>
      </config>
    </profile>
  </profiles>
</erpsv2>
```

### Command Syntax

```
g8032 profile PROFILENAME
```

---

## Configure wait to restore timer

In revertive mode the 'wait to restore' (WTR) timer is used to prevent frequent operation of the protection switching due to intermittent signal failure defects. When recovering from a Signal fail, the delay timer must be long enough to allow the recovering network to become stable. WTR timer is activated on RPL owner node. When WTR timer is expired RPL owner node initiates the reversion process by transmitting an R-APS (NR, RB) message.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: wait-to-restore-timer

Attribute Type: uint8

Default Value: 5

Attribute Range: 1-12

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <profiles>
    <profile>
      <profile-name>PROFILENAME</profile-name>
      <config>
        <profile-name>PROFILENAME</profile-name>
      </config>
      <wait-to-restore-timer>1</wait-to-restore-timer> <!-- operation="delete"-->
    </profile>
  </profiles>
</erpsv2>
```

### Command Syntax

```
timer wait-to-restore <1-12>
```

---

## Configure hold off timer

The hold-off timer is used to coordinate the timing of protection switches. When a new defect or more severe defect occurs (new SF), this event is not to be reported immediately to protection switching if the provisioned hold-off timer value is non-zero. Instead, the hold-off timer is started. When the hold-off timer expires, the trail that started the timer is checked as to whether a defect still exists. If one does exist, that defect is reported to protection switching. Hold off timer values SHOULD be specified in multiple of 100.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: hold-off-timer

Attribute Type: uint16

Default Value: 0

Attribute Range: 0-10000

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <profiles>
    <profile>
      <profile-name>PROFILENAME</profile-name>
```

```

<config>
  <profile-name>PROFILENAME</profile-name>
</config>
<hold-off-timer>0</hold-off-timer> <!-- operation="delete"-->
</profile>
</profiles>
</erpsv2>

```

## Command Syntax

```
timer hold-off <0-10000>
```

---

## Configure guard time

The guard time is used to prevent Ethernet ring nodes from acting upon outdated R-APS messages and prevents the possibility of forming a closed loop. This timer period SHOULD be greater than the maximum expected forwarding delay in which an R-APS message traverses the entire ring. The period of the guard timer MAY be configured by the operator in 10 ms steps between 10 ms and 2 seconds.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: guard-time

Attribute Type: uint16

Default Value: 500

Attribute Range: 10-2000

## Netconf edit-config payload

```

<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <profiles>
    <profile>
      <profile-name>PROFILENAME</profile-name>
      <config>
        <profile-name>PROFILENAME</profile-name>
      </config>
      <guard-time>10</guard-time> <!-- operation="delete"-->
    </profile>
  </profiles>
</erpsv2>

```

## Command Syntax

```
timer guard-time <10-2000>
```

---

## Configure protection mode

This leaf defines G.8032 ring protection mode. A ring may operate in revertive or non-revertive mode. In revertive operation, after the condition(s) causing a switch has cleared, the traffic channel is restored to the working transport entity, i.e., blocked on the RPL. In non-revertive operation, the traffic channel continues to use the RPL, if it has not failed, after a switch condition has cleared.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: protection-mode

Attribute Type: enum (revertive|non-revertive)

Default Value: revertive

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <profiles>
    <profile>
      <profile-name>PROFILENAME</profile-name>
      <config>
        <profile-name>PROFILENAME</profile-name>
      </config>
      <protection-mode>revertive</protection-mode> <!-- operation="delete"-->
    </profile>
  </profiles>
</erpsv2>
```

### Command Syntax

```
switching mode (revertive|non-revertive)
```

---

## Configure name

ERPS instance identifier

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: name

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance> <!-- operation="delete"-->
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
g8032 erp-instance INSTANCENAME
```

---

## Configure mapped profile name

G.8032 ring profile name. If this profile exists in the profile configuration list, profile parameters will be imported from it, default values will be used otherwise.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: mapped-profile-name

Attribute Type: string

Attribute Range: 1-32

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <mapped-profile-name>PROFILENAME</mapped-profile-name> <!-- operation="delete"-->
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
g8032-profile PROFILENAME
```

---

## Configure ring type

Defines type of a ethernet ring. A ring can be configured as major ring where ring nodes are connected in closed loop or as a sub-ring when a ring may not have a complete closed loop

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: ring-type

Attribute Type: enum (major-ring|sub-ring|sub-ring-vc)

Default Value: major-ring

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <ring-type>major-ring</ring-type> <!-- operation="delete"-->
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
ring-type (major-ring|sub-ring|sub-ring-vc)
```

---

## Configure enable tcn propagation

Allows topology change notification (TCN) propagation to the ERPS ring if it is enabled

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: enable-tcn-propagation

Attribute Type: empty

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      </enable-tcn-propagation><!-- operation="delete"-->
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
enable-tcn-propagation
```

---

## Configure tcn to instances

List of Instance that are to be notified when TCN occurs for this instance if topology change notification (TCN) propagation is enabled

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: tcn-to-instances

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <tcn-to-instances>INSTANCENAME</tcn-to-instances> <!-- operation="delete"-->
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
tcn-to-instance INSTANCENAME
```

---

## Configure non virtual channel

Creates a non-virtual channel

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: non-virtual-channel

Attribute Type: empty

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      </non-virtual-channel><!-- operation="delete"-->
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
non-virtual-channel
```

---

## Configure ring id

G.8032 ring instance identifier (Ring ID).

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: ring-id

Attribute Type: uint8

Attribute Range: 1-239

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <ring-id>1</ring-id> <!-- operation="delete"-->
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
ring-id <1-239>
```

---

## Configure associate ring name

G.8032 ring name to be associate with.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: associate-ring-name

Attribute Type: string

Attribute Range: 1-255

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <associate-rings>
        <associate-ring> <!-- operation="delete"-->
          <associate-ring-name>RINGNAME</associate-ring-name>
          <config>
            <associate-ring-name>RINGNAME</associate-ring-name>
          </config>
        </associate-ring>
      </associate-rings>
    </erp-instance>
  </erp-instances>
</erpsv2>
```

### Command Syntax

```
associate-ring RINGNAME
```

---

## Configure owner port id

This identifies the ring port for which role is configured

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: owner-port-id

Attribute Type: enum (east-interface|west-interface)

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <instance-role>
```



```

<config>
  <owner-port-id>east-interface</owner-port-id> <!-- operation="delete"-->
</config>
</instance-role>
</erp-instance>
</erp-instances>
</erpsv2>

```

## Command Syntax

```
rpl role owner (east-interface|west-interface)
```

---

## Configure neighbor port id

This identifies the ring port for which role is configured

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: neighbor-port-id

Attribute Type: enum (east-interface|west-interface)

## Netconf edit-config payload

```

<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
    <instance-role>
      <config>
        <neighbor-port-id>east-interface</neighbor-port-id> <!-- operation="delete"-->
      </config>
    </instance-role>
  </erp-instance>
</erp-instances>
</erpsv2>

```

## Command Syntax

```
rpl role neighbor (east-interface|west-interface)
```

---

## Configure next neighbor port id

This identifies the ring port for which role is configured

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: next-neighbor-port-id

Attribute Type: enum (east-interface|west-interface)

**Netconf edit-config payload**

```

<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <instance-role>
        <config>
          <next-neighbor-port-id>east-interface</next-neighbor-port-id> <!--
operation="delete"-->
        </config>
      </instance-role>
    </erp-instance>
  </erp-instances>
</erpsv2>

```

**Command Syntax**

```
rpl role next-neighbor (east-interface|west-interface)
```

---

**Configure non owner**

This identifies the ring port for which role is configured

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: non-owner

Attribute Type: empty

**Netconf edit-config payload**

```

<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
      <instance-role>
        <config>
          </non-owner><!-- operation="delete"-->
        </config>
      </instance-role>
    </erp-instance>
  </erp-instances>
</erpsv2>

```

**Command Syntax**

```
rpl role non-owner
```

---

## Configure level

Maintenance Endpoint Level (MEL) at which R-APS PDU is transmitted. All nodes in the ring must be configured with same APS level value.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: level

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
    <aps-channel>
      <config>
        <level>0</level> <!-- operation="delete"-->
      </config>
    </aps-channel>
  </erp-instance>
</erp-instances>
</erpsv2>
```

### Command Syntax

```
aps-channel level <0-7>
```

---

## Configure vlan id

ERPS instance identifier

Attribute Name: name

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 2-4094

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance> <!-- operation="delete"-->
  </erp-instances>
</erpsv2>
```

```

    <name>INSTANCENAME</name>
  <config>
    <name>INSTANCENAME</name>
  </config>
<aps-channel-vlans>
<aps-channel-vlan>
  <vlan-id>2</vlan-id>
  <config>
    <inner-vlan-id>2</inner-vlan-id>
  </config>
</aps-channel-vlan>
</aps-channel-vlans>
</erp-instance>
</erp-instances>
</erpsv2>

```

### Command Syntax

```
aps-channel vlan <2-4094> (inner-vlan <2-4094>|)
```

---

## Configure data vlan

List of VLAN-IDs, protected by ring instance. For example '2, 3-7, 9, 10-100' VLAN-IDs MUST not overlap with VLAN-IDs of any other instance of the same ring.

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: data-vlan

Attribute Type: string

Attribute Range: 2-4094

### Netconf edit-config payload

```

<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
    <data>
      <config>
        <data-vlan>VLAN_RANGE</data-vlan> <!-- operation="delete"-->
      </config>
    </data>
  </erp-instance>
</erp-instances>
</erpsv2>

```

### Command Syntax

```
data vlan VLAN_RANGE
```

---

## Configure attached instance

This parameter specifies the ERPS instance on major ring which allows the RAPS messages of Sub-ring, so RAPS message will be sent to other nodes in the sub-ring

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: attached-instance

Attribute Type: string

Attribute Range: 1-31

Attribute Name: channel-id

Attribute Type: uint16

Attribute Range: 2-4094

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <erp-instances>
    <erp-instance>
      <name>INSTANCENAME</name>
      <config>
        <name>INSTANCENAME</name>
      </config>
    <virtual-channel>
      <config>
        <channel-id>2</channel-id>
        <attached-instance>INSTANCENAME</attached-instance>
      </config>
    </virtual-channel>
  </erp-instance>
</erp-instances>
</erpsv2>
```

### Command Syntax

```
virtual-channel (<2-4094>|) attached-to-instance INSTANCENAME
```

---

## Configure options

Supported debug options for G.8032

This command is supported when following feature are enabled ERPS V2 feature

Attribute Name: options

Attribute Type: bits (all|tx|rx|fsm|timers|events|external|hal)

### Netconf edit-config payload

```
<erpsv2 xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <debug>
    <config>
      <options>all</options> <!-- operation="delete"-->
    </config>
```

```
</debug>
</erpsv2>
```

## Command Syntax

```
debug g8032 (all|tx|rx|fsm|timers|events|external|hal)
```

---

## g8032 erp-instance (INSTANCENAME|all) (force-switch|manual-switch) (east-interface|west-interface)

Attribute Name: instance-name

Attribute Type: string

Attribute Range: 1-255

Attribute Name: operation

Attribute Type: enum (force-switch|manual-switch)

Attribute Name: port-id

Attribute Type: enum (east-interface|west-interface)

## Netconf RPC payload

```
<erpsv2-switch-erp-instance xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
erpsv2">
  <instance-name>INSTANCENAME</instance-name>
  <operation>force-switch</operation>
  <port-id>east-interface</port-id>
</erpsv2-switch-erp-instance>
```

## Command Syntax

```
g8032 erp-instance (INSTANCENAME|all) (force-switch|manual-switch) (east-
interface|west-interface)
```

---

## clear g8032 erp-instance (INSTANCENAME|all)

Attribute Name: instance-name

Attribute Type: string

Attribute Range: 1-255

## Netconf RPC payload

```
<erpsv2-clear-ring-erp-instance xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
erpsv2">
  <instance-name>INSTANCENAME</instance-name>
</erpsv2-clear-ring-erp-instance>
```

## Command Syntax

```
clear g8032 erp-instance (INSTANCENAME|all)
```

---

## clear g8032 aps-statistics INSTANCENAME

Attribute Name: instance-name

Attribute Type: string

Attribute Range: 1-255

### Netconf RPC payload

```
<erpsv2-clear-aps-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <instance-name>INSTANCENAME</instance-name>
</erpsv2-clear-aps-statistics>
```

### Command Syntax

```
clear g8032 aps-statistics INSTANCENAME
```

---

## debug g8032 (all|tx|rx|fsm|timers|events|external|hal)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|tx|rx|fsm|timers|events|external|hal)

### Netconf RPC payload

```
<erpsv2-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <terminal-debug-options>all</terminal-debug-options>
</erpsv2-terminal-debug-on>
```

### Command Syntax

```
debug g8032 (all|tx|rx|fsm|timers|events|external|hal)
```

---

## no debug g8032 (all|tx|rx|fsm|timers|events|external|hal)

Attribute Name: terminal-debug-options

Attribute Type: bits (all|tx|rx|fsm|timers|events|external|hal)

### Netconf RPC payload

```
<erpsv2-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-erpsv2">
  <terminal-debug-options>all</terminal-debug-options>
</erpsv2-terminal-debug-off>
```

### Command Syntax

```
no debug g8032 (all|tx|rx|fsm|timers|events|external|hal)
```

---

## IPI-CFM

---

### Configure cache enable

This attribute specifies the cache enable

Attribute Name: cache-enable

Attribute Type: uint8

#### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <global>
    <linktrace>
      <cache>
        <config>
          </cache-enable>
        </config>
      </cache>
    </linktrace>
  </global>
</cfm>
```

#### Command Syntax

```
ethernet cfm traceroute cache
```

---

### Configure cache size

This attribute specifies the cache size

Attribute Name: cache-size

Attribute Type: uint16

Default Value: 100

Attribute Range: 1-4095

Attribute Name: cache-enable

Attribute Type: empty

#### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <global>
    <linktrace>
      <cache>
        <config>
          </cache-enable><!-- operation="delete"-->
          <cache-size>1</cache-size> <!-- operation="delete"-->
        </config>
      </cache>
    </linktrace>
  </global>
</cfm>
```



```

</linktrace>
</global>
</cfm>

```

## Command Syntax

```
ethernet cfm traceroute cache size <1-4095>
```

---

## Configure options

This attribute enables debugging for CFM

This command is supported when following feature are enabled CFM feature

Attribute Name: options

Attribute Type: bits (events|rx|tx|loopback|traceroute|all)

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <debug>
  <config>
    <options>events</options> <!-- operation="delete"-->
  </config>
</debug>
</cfm>

```

## Command Syntax

```
debug ethernet cfm (events|rx|tx|loopback|traceroute|all)
```

---

## Configure type

Type discriminator for the value union described in the 'md-name' leaf

Attribute Name: type

Attribute Type: enum (no-name|character-string)

Attribute Name: level

Attribute Type: uint8

Attribute Range: 0-7

Attribute Name: mip-creation

Attribute Type: enum (none|default|explicit)

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
  <maintenance-domain>
    <md-name>DOMAIN_NAME</md-name>
    <config>
      <md-name>DOMAIN_NAME</md-name>
      <level>0</level>
      <mip-creation>none</mip-creation>
    </config>
  </maintenance-domain>
</maintenance-domains>
</cfm>

```

```

    </config>
    <type>no-name</type>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```

ethernet cfm domain-type (no-name|character-string) domain-name DOMAIN_NAME level
<0-7> (mip-creation (none|default|explicit)|)

```

---

## Configure ma name

The value union for the Maintenance Association Name.

Attribute Name: ma-name

Attribute Type: string

Attribute Range: 1-43

Attribute Name: type

Attribute Type: enum (string|integer|itu-t)

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
    <md-name>DOMAIN_NAME</md-name>
    <config>
        <md-name>DOMAIN_NAME</md-name>
    </config>
</maintenance-domain>
</maintenance-domains>
<maintenance-associations>
<maintenance-association> <!-- operation="delete"-->
    <ma-name>MA_NAME</ma-name>
    <config>
        <ma-name>MA_NAME</ma-name>
        <type>string</type>
    </config>
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```

service ma-type (string|integer|itu-t) ma-name MA_NAME

```

---

## Configure bridge id

This parameter indicates which bridge this maintenance association will be augmented to.

This command is supported when following feature are enabled CFM feature

Attribute Name: bridge-id

Attribute Type: string

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

### Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
      <md-name>DOMAIN_NAME</md-name>
      <config>
        <md-name>DOMAIN_NAME</md-name>
      </config>
    </maintenance-domain>
  </maintenance-domains>
  <maintenance-associations>
    <maintenance-association>
      <ma-name>MA_NAME</ma-name>
      <config>
        <ma-name>MA_NAME</ma-name>
        <vlan-id>1</vlan-id> <!-- operation="delete"-->
      </config>
        <bridge-id>1</bridge-id> <!-- operation="delete"-->
      </maintenance-association>
    </maintenance-associations>
  </maintenance-domains>
</cfm>

```

### Command Syntax

```
vlan <1-4094> (bridge <1-32>|)
```

## Configure md name

This parameter indicates which bridge this maintenance association will be augmented to.

This command is supported when following feature are enabled CFM feature

Attribute Name: bridge-id

Attribute Type: string

Attribute Name: link-level-ma

Attribute Type: empty

### Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
      <md-name>DOMAIN_NAME</md-name>
      <config>

```

```

    <md-name>DOMAIN_NAME</md-name>
  </config>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
    </link-level-ma><!-- operation="delete"-->
  </config>
  <bridge-id>1</bridge-id> <!-- operation="delete"-->
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```
link-level (bridge <1-32>|)
```

## Configure mip creation

This parameter indicates whether the management entity can create MIPs for this MA

This command is supported when following feature are enabled CFM feature

Attribute Name: mip-creation

Attribute Type: enum (none|default|explicit|defer)

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
    <mip-creation>none</mip-creation> <!-- operation="delete"-->
  </config>
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```
(mip-creation (none|default|explicit|defer) |)
```

---

## Configure inner vlan id

The inner VLAN ID monitored by this MA

This command is supported when following feature are enabled CFM feature

Attribute Name: inner-vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

Attribute Name: vlan-id

Attribute Type: uint16

Attribute Range: 1-4094

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
      <md-name>DOMAIN_NAME</md-name>
      <config>
        <md-name>DOMAIN_NAME</md-name>
      </config>
    </maintenance-domain>
    <maintenance-associations>
      <maintenance-association>
        <ma-name>MA_NAME</ma-name>
        <config>
          <ma-name>MA_NAME</ma-name>
          <vlan-id>1</vlan-id> <!-- operation="delete"-->
          <inner-vlan-id>1</inner-vlan-id> <!-- operation="delete"-->
        </config>
      </maintenance-association>
    </maintenance-associations>
  </maintenance-domains>
</cfm>
```

### Command Syntax

```
vlan <1-4094> (inner-vlan <1-4094>|)
```

---

## Configure link level ma

Use this attribute to set the Service as Link Level MA

This command is supported when following feature are enabled CFM feature

Attribute Name: link-level-ma

Attribute Type: empty

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
```

```

<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
</maintenance-domain>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
  </link-level-ma><!-- operation="delete"-->
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

link-level

---

## Configure mip interface name

A list of static MIPs configured on the specified interfaces

This command is supported when following feature are enabled CFM feature

Attribute Name: mip-interface-name

Attribute Type: string

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
</maintenance-domain>
</maintenance-domains>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
  <mip-interface-name>IFNAME</mip-interface-name> <!-- operation="delete"-->
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```
ethernet cfm mip interface IFNAME
```

---

## Configure evpn id

Use this attribute to set the Service as EVPN MA

This command is supported when following feature are enabled CFM feature

Attribute Name: evpn-id

Attribute Type: uint32

Attribute Range: 1-16777215

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
      <md-name>DOMAIN_NAME</md-name>
      <config>
        <md-name>DOMAIN_NAME</md-name>
      </config>
    </maintenance-domain>
  </maintenance-domains>
  <maintenance-associations>
    <maintenance-association>
      <ma-name>MA_NAME</ma-name>
      <config>
        <ma-name>MA_NAME</ma-name>
        <evpn-id>1</evpn-id> <!-- operation="delete"-->
      </config>
    </maintenance-association>
  </maintenance-associations>
</cfm>
```

## Command Syntax

```
evpn <1-16777215>
```

---

## Configure ccm interval

The interval between CCM transmissions to be used by all MEPs in the MA

This command is supported when following feature are enabled CFM feature

Attribute Name: ccm-interval

Attribute Type: enum (10ms|100ms|1s|10s|1min|10min)

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
```

```

    <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
  <ccm-interval>10ms</ccm-interval> <!-- operation="delete"-->
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```
cc interval (10ms|100ms|1s|10s|1min|10min)
```

---

## Configure static rmep identifiers

A list of static remote MEPs in a specified MA.

This command is supported when following feature are enabled CFM feature

Attribute Name: static-rmep-identifiers

Attribute Type: uint16

Attribute Range: 1-8191

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
  <maintenance-domain>
    <md-name>DOMAIN_NAME</md-name>
    <config>
      <md-name>DOMAIN_NAME</md-name>
    </config>
  <maintenance-associations>
  <maintenance-association>
    <ma-name>MA_NAME</ma-name>
    <config>
      <ma-name>MA_NAME</ma-name>
    </config>
    <static-rmep-identifiers>1</static-rmep-identifiers> <!-- operation="delete"-->
  ->
  </maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```



## Command Syntax

```
mep crosscheck mpid <1-8191>
```

---

## Configure mep id

Integer that is unique among all the MEPs in the same MA. Other definition is: a small integer, unique over a given Maintenance Association, identifying a specific Maintenance association End Point

Attribute Name: mep-id

Attribute Type: uint16

Attribute Range: 1-8191

Attribute Name: direction

Attribute Type: enum (down|up)

Attribute Name: administrative-state

Attribute Type: enum (false|true)

Attribute Name: interface-name

Attribute Type: string

## Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
</maintenance-domains>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
<maintenance-end-points>
<maintenance-end-point> <!-- operation="delete"-->
  <mep-id>1</mep-id>
  <config>
    <mep-id>1</mep-id>
    <direction>down</direction>
    <administrative-state>false</administrative-state>
    <interface-name>IFNAME</interface-name>
  </config>
</maintenance-end-point>
</maintenance-end-points>
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
```

---

```
</cfm>
```

## Command Syntax

```
ethernet cfm mep (down|up) mpid <1-8191> active (false|true) IFNAME
```

---

## Configure direction

Integer that is unique among all the MEPs in the same MA. Other definition is: a small integer, unique over a given Maintenance Association, identifying a specific Maintenance association End Point

Attribute Name: mep-id

Attribute Type: uint16

Attribute Range: 1-8191

Attribute Name: direction

Attribute Type: enum (down|up)

Attribute Name: administrative-state

Attribute Type: enum (false|true)

Attribute Name: remote-evpn-id

Attribute Type: uint32

Attribute Range: 1-16777215

## Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
</maintenance-domain>
</maintenance-domains>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
<maintenance-end-points>
<maintenance-end-point> <!-- operation="delete"-->
  <mep-id>1</mep-id>
  <config>
    <mep-id>1</mep-id>
    <direction>down</direction>
    <administrative-state>false</administrative-state>
    <remote-evpn-id>1</remote-evpn-id>
  </config>
</maintenance-end-point>
</maintenance-end-points>
</maintenance-association>
```

```

</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```
ethernet cfm mep (down|up) mpid <1-8191> active (false|true) evpn <1-16777215>
```

---

## Configure bw mapped interface

This attribute specifies interface where the bandwidth shapers are to be applied

This command is supported when following feature are enabled CFM feature

Attribute Name: bw-mapped-interface

Attribute Type: string

## Netconf edit-config payload

```

<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
</maintenance-domains>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
</maintenance-association>
<maintenance-end-points>
<maintenance-end-point>
  <mep-id>1</mep-id>
  <config>
    <mep-id>1</mep-id>
  </config>
  <bw-mapped-interface>IFNAME</bw-mapped-interface> <!--
operation="delete"-->
</maintenance-end-point>
</maintenance-end-points>
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>

```

## Command Syntax

```
bw-mapped-interface IFNAME
```

---

## Configure enable cc multicast

Integer that is unique among all the MEPs in the same MA. Other definition is: a small integer, unique over a given Maintenance Association, identifying a specific Maintenance association End Point

Attribute Name: mep-id

Attribute Type: uint16

Attribute Name: enable-cc-multicast

Attribute Type: empty

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
<maintenance-domain>
  <md-name>DOMAIN_NAME</md-name>
  <config>
    <md-name>DOMAIN_NAME</md-name>
  </config>
</maintenance-domain>
</maintenance-domains>
<maintenance-associations>
<maintenance-association>
  <ma-name>MA_NAME</ma-name>
  <config>
    <ma-name>MA_NAME</ma-name>
  </config>
  <maintenance-end-points>
  <maintenance-end-point>
    <mep-id>1</mep-id>
    <config>
      <mep-id>1</mep-id>
    </config>
    <continuity-check>
    <config>
      </enable-cc-multicast>
    </config>
  </continuity-check>
</maintenance-end-point>
</maintenance-end-points>
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>
```

### Command Syntax

```
cc multicast state enable
```

## Configure lowest fault priority defect

The lowest priority defect that is allowed to generate a Fault Alarm. The non-existence of this leaf means that no defects are to be reported

This command is supported when following feature are enabled CFM feature

Attribute Name: lowest-fault-priority-defect

Attribute Type: enum (defRDICCM|defMACstatus|defRemoteCCM|defErrorCCM|defXconCCM)

Default Value: defMACstatus

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
      <md-name>DOMAIN_NAME</md-name>
      <config>
        <md-name>DOMAIN_NAME</md-name>
      </config>
    </maintenance-domain>
  </maintenance-domains>
  <maintenance-associations>
    <maintenance-association>
      <ma-name>MA_NAME</ma-name>
      <config>
        <ma-name>MA_NAME</ma-name>
      </config>
    </maintenance-association>
  </maintenance-associations>
  <maintenance-end-points>
    <maintenance-end-point>
      <mep-id>1</mep-id>
      <config>
        <mep-id>1</mep-id>
      </config>
      <continuity-check>
        <config>
          <lowest-fault-priority-defect>defMACstatus</lowest-fault-priority-
defect> <!-- operation="delete"-->
        </config>
      </continuity-check>
    </maintenance-end-point>
  </maintenance-end-points>
</maintenance-association>
</maintenance-associations>
</maintenance-domain>
</maintenance-domains>
</cfm>
```

### Command Syntax

```
mep lowest-priority-defect
  (defRDICCM|defMACstatus|defRemoteCCM|defErrorCCM|defXconCCM)
```

---

## clear ethernet cfm maintenance-points remote domain DOMAIN\_NAME

Attribute Name: domain-name

Attribute Type: string

### Netconf RPC payload

```
<cfm-l2-clear-ethernet-remote-meps xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-cfm">
  <domain-name>DOMAIN_NAME</domain-name>
</cfm-l2-clear-ethernet-remote-meps>
```

### Command Syntax

```
clear ethernet cfm maintenance-points remote domain DOMAIN_NAME
```

---

## clear ethernet cfm statistics

### Netconf RPC payload

```
<cfm-clear-all-mep-stats xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm"/>
```

### Command Syntax

```
clear ethernet cfm statistics
```

---

## clear ethernet cfm statistics mep <1-8191> domain DOMAIN\_NAME ma MA\_NAME

Attribute Name: mep-id

Attribute Type: uint16

Attribute Range: 1-8191

Attribute Name: domain-name

Attribute Type: string

Attribute Name: ma-name

Attribute Type: string

Attribute Range: 1-6

### Netconf RPC payload

```
<cfm-l2-clear-mep-stats xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <mep-id>1</mep-id>
  <domain-name>DOMAIN_NAME</domain-name>
  <ma-name>MA_NAME</ma-name>
</cfm-l2-clear-mep-stats>
```

### Command Syntax

```
clear ethernet cfm statistics mep <1-8191> domain DOMAIN_NAME ma MA_NAME
```

---

## cfm snmp restart

### Netconf RPC payload

```
<cfm-snmp-restart xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm"/>
```

### Command Syntax

```
cfm snmp restart
```

---

## debug ethernet cfm (events|rx|tx|loopback|traceroute|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (events|rx|tx|loopback|traceroute|all)

### Netconf RPC payload

```
<cfm-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <terminal-debug-options>events</terminal-debug-options>
</cfm-terminal-debug-on>
```

### Command Syntax

```
debug ethernet cfm (events|rx|tx|loopback|traceroute|all)
```

---

## no debug ethernet cfm (events|rx|tx|loopback|traceroute|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (events|rx|tx|loopback|traceroute|all)

### Netconf RPC payload

```
<cfm-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <terminal-debug-options>events</terminal-debug-options>
</cfm-terminal-debug-off>
```

### Command Syntax

```
no debug ethernet cfm (events|rx|tx|loopback|traceroute|all)
```

---

## clear ethernet cfm traceroute-cache

### Netconf RPC payload

```
<cfm-l2-clear-linktrace-cache xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm"/>
```

### Command Syntax

```
clear ethernet cfm traceroute-cache
```

## IPI-CFM-Y1731

### Configure enable status

This attribute specifies whether ETH-AIS transmission is enabled

Attribute Name: enable-status

Attribute Type: uint8

Attribute Name: client-md-level

Attribute Type: uint8

Attribute Range: 0-7

### Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
  <maintenance-domains>
    <maintenance-domain>
      <md-name>DOMAIN_NAME</md-name>
      <config>
        <md-name>DOMAIN_NAME</md-name>
      </config>
      <maintenance-associations>
        <maintenance-association>
          <ma-name>MA_NAME</ma-name>
          <config>
            <ma-name>MA_NAME</ma-name>
          </config>
          <maintenance-end-points>
            <maintenance-end-point>
              <mep-id>1</mep-id>
              <config>
                <mep-id>1</mep-id>
              </config>
              <ethernet-alarm-indication-signal>
                <config>
                  <client-md-level>0</client-md-level>
                  </enable-status>
                </config>
              </ethernet-alarm-indication-signal>
            </maintenance-end-point>
          </maintenance-end-points>
        </maintenance-association>
      </maintenance-associations>
    </maintenance-domain>
  </maintenance-domains>
</cfm>
```



## Command Syntax

```
ais status enable level <0-7>
```

---

## Configure interval

This attribute specifies the ETH-AIS transmission period

This command is supported when following feature are enabled CFM Y1731 feature

Attribute Name: interval

Attribute Type: enum (1s|1min)

Default Value: 1s

## Netconf edit-config payload

```
<cfm xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-cfm">
<maintenance-domains>
  <maintenance-domain>
    <md-name>DOMAIN_NAME</md-name>
    <config>
      <md-name>DOMAIN_NAME</md-name>
    </config>
    <maintenance-associations>
      <maintenance-association>
        <ma-name>MA_NAME</ma-name>
        <config>
          <ma-name>MA_NAME</ma-name>
        </config>
        <maintenance-end-points>
          <maintenance-end-point>
            <mep-id>1</mep-id>
            <config>
              <mep-id>1</mep-id>
            </config>
            <ethernet-alarm-indication-signal>
              <config>
                <interval>1s</interval> <!-- operation="delete"-->
              </config>
            </ethernet-alarm-indication-signal>
          </maintenance-end-point>
        </maintenance-end-points>
      </maintenance-association>
    </maintenance-associations>
  </maintenance-domain>
</maintenance-domains>
</cfm>
```

## Command Syntax

```
ais interval (1s|1min)
```

---

## IPI-UDLD

---

### Configure enable

Use this attribute to enable UDLD

Attribute Name: enable

Attribute Type: empty

#### Netconf edit-config payload

```
<udld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <global>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </global>
</udld>
```

#### Command Syntax

```
udld enable
```

---

### Configure message time

Use this attribute to set UDLD message interval value

Attribute Name: message-time

Attribute Type: uint8

Attribute Range: 7-90

#### Netconf edit-config payload

```
<udld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <global>
    <config>
      <message-time>7</message-time> <!-- operation="delete"-->
    </config>
  </global>
</udld>
```

#### Command Syntax

```
udld message-time <7-90>
```

---

### Configure options

Use this attribute to enable or disable UDLD debugging at various levels

Attribute Name: options

Attribute Type: bits (event|packet|timer|nsm|hal|all)

### Netconf edit-config payload

```
<udld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <debug>
  <config>
    <options>event</options> <!-- operation="delete"-->
  </config>
</debug>
</udld>
```

### Command Syntax

```
debug udld (event|packet|timer|nsm|hal|all)
```

---

## Configure mode

Use this attribute to configure UDLD mode for an interface

Attribute Name: mode

Attribute Type: enum (normal|aggressive)

### Netconf edit-config payload

```
<udld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <interfaces>
  <interface>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
    <mode>normal</mode> <!-- operation="delete"-->
  </interface>
</interfaces>
</udld>
```

### Command Syntax

```
udld mode (normal|aggressive)
```

---

## Configure administrative state

Use this attribute configure UDLD administrative state for an interface

Attribute Name: administrative-state

Attribute Type: enum (disable|enable)

### Netconf edit-config payload

```
<udld xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <interfaces>
  <interface>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
```

```

    <administrative-state>disable</administrative-state> <!-- operation="delete"-->
  </interface>
</interfaces>
</udld>

```

### Command Syntax

```
udld state (disable|enable)
```

---

## debug udld (event|packet|timer|nsm|hal|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|packet|timer|nsm|hal|all)

### Netconf RPC payload

```

<udld-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <terminal-debug-options>event</terminal-debug-options>
</udld-terminal-debug-on>

```

### Command Syntax

```
debug udld (event|packet|timer|nsm|hal|all)
```

---

## no debug udld (event|packet|timer|nsm|hal|all)

Attribute Name: terminal-debug-options

Attribute Type: bits (event|packet|timer|nsm|hal|all)

### Netconf RPC payload

```

<udld-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-udld">
  <terminal-debug-options>event</terminal-debug-options>
</udld-terminal-debug-off>

```

### Command Syntax

```
no debug udld (event|packet|timer|nsm|hal|all)
```

---

## IPI-EFM

---

### Configure link monitor off

Ethernet OAM link monitoring on the interface

Attribute Name: link-monitor-off

Attribute Type: uint8

### Netconf edit-config payload

```

<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>

```

```

    <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
</link-monitor-off><!-- operation="delete"-->
</interface>
</interfaces>
</ethernet-oam>

```

### Command Syntax

```
no ethernet oam link-monitor on
```

---

## Configure remote loopback start

Ethernet OAM remote loopback trigger on interface

Attribute Name: remote-loopback-start

Attribute Type: uint8

### Netconf edit-config payload

```

<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </remote-loopback-start><!-- operation="delete"-->
    </interface>
  </interfaces>
</ethernet-oam>

```

### Command Syntax

```
ethernet oam remote-loopback start
```

---

## Configure enable

Enable Ethernet OAM on the interface

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```

<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
    </interface>
  </interfaces>
</ethernet-oam>

```

```

    </enable><!-- operation="delete"-->
</interface>
</interfaces>
</ethernet-oam>

```

## Command Syntax

```
ethernet oam enable
```

---

## Configure mode

Ethernet OAM mode on the interface

Attribute Name: mode

Attribute Type: enum (active|passive)

### Netconf edit-config payload

```

<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <mode>active</mode> <!-- operation="delete"-->
</interface>
</interfaces>
</ethernet-oam>

```

## Command Syntax

```
ethernet oam mode (active|passive)
```

---

## Configure link lost timeout

Ethernet OAM link lost timer related configs

Attribute Name: link-lost-timeout

Attribute Type: uint8

Attribute Range: 2-30

### Netconf edit-config payload

```

<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
<interfaces>
<interface>
    <name>WORD</name>
    <config>
        <name>WORD</name>
    </config>
    <link-lost-timeout>2</link-lost-timeout> <!-- operation="delete"-->
</interface>

```

```
</interfaces>  
</ethernet-oam>
```

## Command Syntax

```
ethernet oam timeout <2-30>
```

---

## Configure pdu min rate

OAMPDU minimum rate per second

Attribute Name: pdu-min-rate

Attribute Type: uint8

Attribute Range: 1-10

## Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">  
  <interfaces>  
    <interface>  
      <name>WORD</name>  
      <config>  
        <name>WORD</name>  
        </config>  
        <pdu-min-rate>1</pdu-min-rate> <!-- operation="delete"-->  
      </interface>  
    </interfaces>  
  </ethernet-oam>
```

## Command Syntax

```
ethernet oam min-rate <1-10>
```

---

## Configure pdu max rate

OAMPDU maximum rate per second

Attribute Name: pdu-max-rate

Attribute Type: uint8

Attribute Range: 1-10

## Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">  
  <interfaces>  
    <interface>  
      <name>WORD</name>  
      <config>  
        <name>WORD</name>  
        </config>  
        <pdu-max-rate>1</pdu-max-rate> <!-- operation="delete"-->  
      </interface>  
    </interfaces>
```

```
</ethernet-oam>
```

## Command Syntax

```
ethernet oam max-rate <1-10>
```

---

## Configure unidirectional link support

Ethernet OAM unidirectional link support on the interface

Attribute Name: unidirectional-link-support

Attribute Type: empty

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </unidirectional-link-support><!-- operation="delete"-->
</interface>
</interfaces>
</ethernet-oam>
```

## Command Syntax

```
ethernet oam unidirectional-link supported
```

---

## Configure remote loopback support

Ethernet OAM remote loopback support on the interface

Attribute Name: remote-loopback-support

Attribute Type: empty

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  </remote-loopback-support><!-- operation="delete"-->
</interface>
</interfaces>
</ethernet-oam>
```

## Command Syntax

```
ethernet oam remote-loopback supported
```



---

## Configure remote loopback timeout

Ethernet OAM remote loopback timeout on the interface

Attribute Name: remote-loopback-timeout

Attribute Type: uint8

Attribute Range: 1-10

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <remote-loopback-timeout>1</remote-loopback-timeout> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ethernet-oam>
```

### Command Syntax

```
ethernet oam remote-loopback timeout <1-10>
```

---

## Configure link monitor support

Ethernet OAM link monitor support on the interface

Attribute Name: link-monitor-support

Attribute Type: empty

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      </link-monitor-support><!-- operation="delete"-->
    </interface>
  </interfaces>
</ethernet-oam>
```

### Command Syntax

```
ethernet oam link-monitor supported
```

---

## Configure link monitor event log size

Ethernet OAM maximum event log entries on interface

Attribute Name: link-monitor-event-log-size

Attribute Type: uint8

Attribute Range: 1-100

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <link-monitor-event-log-size>1</link-monitor-event-log-size> <!--
operation="delete"-->
    </interface>
  </interfaces>
</ethernet-oam>
```

### Command Syntax

```
ethernet oam link-monitor event-log-size <1-100>
```

---

## Configure disable port on remote failure events

Ethernet OAM remote failure action on interface

Attribute Name: disable-port-on-remote-failure-events

Attribute Type: bits (dying-gasp|link-fault|critical-event)

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <disable-port-on-remote-failure-events>dying-gasp</disable-port-on-remote-
failure-events> <!-- operation="delete"-->
    </interface>
  </interfaces>
</ethernet-oam>
```

### Command Syntax

```
ethernet oam remote-failure {dying-gasp|link-fault|critical-event} action error-
  disable-interface
```

---

## Configure options

Debugging enable configuration for Ethernet OAM

Attribute Name: options

Attribute Type: bits (event|rx|tx|all)

### Netconf edit-config payload

```
<ethernet-oam xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <debug>
    <config>
      <options>event</options> <!-- operation="delete"-->
    </config>
  </debug>
</ethernet-oam>
```

### Command Syntax

```
debug ethernet oam (event|rx|tx|all)
```

---

## debug ethernet oam (event|rx|tx|all)

Attribute Name: terminal-debug-status

Attribute Type: bits (event|rx|tx|all)

### Netconf RPC payload

```
<efm-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <terminal-debug-status>event</terminal-debug-status>
</efm-terminal-debug-on>
```

### Command Syntax

```
debug ethernet oam (event|rx|tx|all)
```

---

## no debug ethernet oam (event|rx|tx|all)

Attribute Name: terminal-debug-status

Attribute Type: bits (event|rx|tx|all)

### Netconf RPC payload

```
<efm-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <terminal-debug-status>event</terminal-debug-status>
</efm-terminal-debug-off>
```

### Command Syntax

```
no debug ethernet oam (event|rx|tx|all)
```

---

## clear ethernet oam statistics interface IFNAME

Attribute Name: name

Attribute Type: string

### Netconf RPC payload

```
<clear-interface-oam-counters xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-efm">
  <name>IFNAME</name>
</clear-interface-oam-counters>
```

### Command Syntax

```
clear ethernet oam statistics interface IFNAME
```

---

## IPI-ROLE-BASED-ACCESS-CONTROL

---

### Configure policy name

Use this attribute to create a TACACS+ Role-Based Authorization (RBAC) policy and enter RBAC policy mode.

Attribute Name: policy-name

Attribute Type: string

Attribute Range: 2-16

### Netconf edit-config payload

```
<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-based-access-control">
  <policies>
    <policy> <!-- operation="delete"-->
      <policy-name>POLICY-NAME</policy-name>
      <config>
        <policy-name>POLICY-NAME</policy-name>
      </config>
    </policy>
  </policies>
</role-based-access-control>
```

### Command Syntax

```
policy POLICY-NAME
```

---

### Configure command mode

Attribute to specify the mode in which CLI should be allowed/denied. Command prompt string such as 'config-router' or 'config-if', deny/Permit access to the command only in this mode.

Attribute Name: command-mode

Attribute Type: string

Attribute Name: rule-type

Attribute Type: enum (deny|permit)

**Netconf edit-config payload**

```

<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-
based-access-control">
  <policies>
    <policy>
      <policy-name>POLICY-NAME</policy-name>
      <config>
        <policy-name>POLICY-NAME</policy-name>
      </config>
    </policy>
  </policies>
  <rules>
    <rule>
      <rule-name>RULE-STRING</rule-name>
      <config>
        <rule-name>RULE-STRING</rule-name>
        <rule-type>deny</rule-type> <!-- operation="delete"-->
      </config>
      <command-mode>MODE-NAME</command-mode> <!-- operation="delete"-->
    </rule>
  </rules>
</role-based-access-control>

```

**Command Syntax**

```
(deny|permit) RULE-STRING mode MODE-NAME
```

**Configure rule name**

This attribute specifies rule string configured as regex-expression for cli authorization

Attribute Name: rule-name

Attribute Type: string

Attribute Range: 3-255

Attribute Name: rule-type

Attribute Type: enum (deny|permit)

**Netconf edit-config payload**

```

<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-
based-access-control">
  <policies>
    <policy>
      <policy-name>POLICY-NAME</policy-name>
      <config>
        <policy-name>POLICY-NAME</policy-name>
      </config>
    </policy>
  </policies>
  <rules>
    <rule>
      <rule-name>RULE-STRING</rule-name>
      <config>

```

```

        <rule-name>RULE-STRING</rule-name>
        <rule-type>deny</rule-type>
    </config>
</rule>
</rules>
</policy>
</policies>
</role-based-access-control>

```

## Command Syntax

```
(deny|permit) RULE-STRING
```

---

## Configure rule type

Attribute to specify the mode in which CLI should be allowed/denied. Command prompt string such as 'config-router' or 'config-if', deny/Permit access to the command only in this mode.

Attribute Name: command-mode

Attribute Type: string

Attribute Name: rule-type

Attribute Type: enum (deny|permit)

## Netconf edit-config payload

```

<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-
based-access-control">
  <policies>
    <policy>
      <policy-name>POLICY-NAME</policy-name>
      <config>
        <policy-name>POLICY-NAME</policy-name>
      </config>
    </policy>
  </policies>
  <rules>
    <rule>
      <rule-name>RULE-STRING</rule-name>
      <config>
        <rule-name>RULE-STRING</rule-name>
        <rule-type>deny</rule-type>
      </config>
      <command-mode>MODE-NAME</command-mode>
    </rule>
  </rules>
</role-based-access-control>

```

## Command Syntax

```
(deny|permit) RULE-STRING mode MODE-NAME
```

---

## Configure role name

Use this attribute to create a TACACS+ Role-Based Authorization (RBAC) role and to switch to RBAC role mode. End-user cannot specify one of these roles already defined in OcNOS: network-admin network-user network-operator network-engineer For more about these built-in roles, see 'username' CLI configuration

Attribute Name: role-name

Attribute Type: string

Attribute Range: 2-16

### Netconf edit-config payload

```
<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-based-access-control">
  <roles>
    <role> <!-- operation="delete"-->
      <role-name>ROLE-NAME</role-name>
      <config>
        <role-name>ROLE-NAME</role-name>
      </config>
    </role>
  </roles>
</role-based-access-control>
```

### Command Syntax

```
role ROLE-NAME
```

---

## Configure default policy

Use this attribute to set the default rule for a TACACS+ Role-Based Access Control (RBAC) role.

Attribute Name: default-policy

Attribute Type: enum (deny-all|permit-all)

Default Value: deny-all

### Netconf edit-config payload

```
<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-based-access-control">
  <roles>
    <role>
      <role-name>ROLE-NAME</role-name>
      <config>
        <role-name>ROLE-NAME</role-name>
      </config>
      <default-policy>deny-all</default-policy> <!-- operation="delete"-->
    </role>
  </roles>
</role-based-access-control>
```

### Command Syntax

```
default (deny-all|permit-all)
```

---

## Configure enable

Enable or disable the TACAS+ Role-Based Access Control of RBAC feature

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<role-based-access-control xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-role-
based-access-control">
  <config>
    </enable><!-- operation="delete"-->
  </config>
</role-based-access-control>
```

### Command Syntax

```
feature dynamic-rbac
```

---

## IPI-PORT-BREAKOUT

---

### Configure interface

Name of the interface to breakout

Attribute Name: interface

Attribute Type: string

Attribute Name: mode

Attribute Type: enum

(4X10g|4X25g|2X50g|4X100g|8X50g|8X25g|8X10g|2X200g|3X100g|2X100g|1X100g|1X200g|4X50g|1X40g)

### Netconf edit-config payload

```
<port-breakout xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-breakout">
  <breakouts>
    <breakout> <!-- operation="delete"-->
      <interface>IFNAME</interface>
      <config>
        <interface>WORD</interface>
        <mode>4X10g</mode>
      </config>
    </breakout>
  </breakouts>
</port-breakout>
```

### Command Syntax

```
port IFNAME breakout
(4X10g|4X25g|2X50g|4X100g|8X50g|8X25g|8X10g|2X200g|3X100g|1X200g|4X50g)
```



---

## Configure mode

Name of the interface to breakout

Attribute Name: interface

Attribute Type: string

Attribute Name: mode

Attribute Type: enum

(4X10g|4X25g|2X50g|4X100g|8X50g|8X25g|8X10g|2X200g|3X100g|2X100g|1X100g|1X200g|4X50g|1X40g)

Attribute Name: serdes

Attribute Type: enum (25g)

### Netconf edit-config payload

```
<port-breakout xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-breakout">
  <breakouts>
    <breakout> <!-- operation="delete"-->
      <interface>IFNAME</interface>
      <config>
        <interface>WORD</interface>
        <mode>4X10g</mode>
        <serdes>25g</serdes>
      </config>
    </breakout>
  </breakouts>
</port-breakout>
```

### Command Syntax

```
port IFNAME breakout (2X100g|1X100g) (serdes (25g) |)
```

---

## Configure port group

Use this attribute to set the port group associated with this instance

This command is supported when following feature are disabled DUNE feature

Attribute Name: port-group

Attribute Type: uint8

Attribute Range: 1-64

Attribute Name: speed

Attribute Type: enum (10g)

### Netconf edit-config payload

```
<port-breakout xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-breakout">
  <groups-speed>
    <group-speed> <!-- operation="delete"-->
      <port-group>1</port-group>
    <config>
      <port-group>0</port-group>
    </config>
  </group-speed>
</port-breakout>
```

```

    <speed>10g</speed>
  </config>
</group-speed>
</groups-speed>
</port-breakout>

```

### Command Syntax

```
port-group <1-64> speed (10g)
```

---

## Configure name

Use this attribute to configure Port-breakout mode for an interface

Attribute Name: mode

Attribute Type: enum (4X10g|4X25g|2X50g)

### Netconf edit-config payload

```

<port-breakout xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-port-breakout">
  <interfaces>
    <interface>
      <name>WORD</name>
      <config>
        <name>WORD</name>
      </config>
      <mode>4X10g</mode> <!-- operation="delete"-->
    </interface>
  </interfaces>
</port-breakout>

```

### Command Syntax

```
port breakout enable (4X10g|4X25g|2X50g)
```

---

## IPI-SOURCE-INTERFACE

---

### Configure vrf name

VRF to apply the source-interface.

This command is supported when following feature are enabled hostp feature

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: port-number

Attribute Type: union

### Netconf edit-config payload

```

<source-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-source-
interface">

```

```

<address-family-ipv4>
<source-nat-mappings>
<source-nat-mapping>
  <vrf-name>VRF_NAME</vrf-name>
  <config>
    <vrf-name>VRF_NAME</vrf-name>
    <protocol-type>tacacs+</protocol-type>
    <interface-name>WORD</interface-name>
    <port-number>0</port-number> <!-- operation="delete"-->
  </config>
  <protocol-type>tacacs+</protocol-type>
  <interface-name>IFNAME</interface-name>
</source-nat-mapping>
</source-nat-mappings>
</address-family-ipv4>
</source-interface>

```

## Command Syntax

```
ip source-interface IFNAME (tacacs+|ntp|snmp|syslog|radius) (port (0|<1025-65535>)|) (vrf VRF_NAME|)
```

---

## Configure interface name

VRF to apply the source-interface.

This command is supported when following feature are enabled IPV6 feature,hostp feature

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: port-number

Attribute Type: union

## Netconf edit-config payload

```

<source-interface xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-source-
interface">
  <address-family-ipv6>
  <source-nat-mappings>
  <source-nat-mapping>
    <vrf-name>VRF_NAME</vrf-name>
    <config>
      <vrf-name>VRF_NAME</vrf-name>
      <protocol-type>tacacs+</protocol-type>
      <interface-name>WORD</interface-name>
      <port-number>0</port-number> <!-- operation="delete"-->
    </config>
    <protocol-type>tacacs+</protocol-type>
    <interface-name>IFNAME</interface-name>
  </source-nat-mapping>
</source-nat-mappings>
</address-family-ipv6>

```

---

```
</source-interface>
```

## Command Syntax

```
ipv6 source-interface IFNAME (tacacs+|ntp|snmp|syslog|radius) (port (0|<1025-65535>)|) (vrf VRF_NAME|)
```

---

## IPI-TACACS

---

### Configure feature enable

Use this attribute to enable the TACACS+ feature

Attribute Name: feature-enable

Attribute Type: empty

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
      </feature-enable>
    </vrf>
  </vrfs>
</tacacs>
```

## Command Syntax

```
feature tacacs+ (vrf (management|NAME)|)
```

---

### Configure vrf name

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
```

```

    <config>
      <vrf-name>management</vrf-name>
      <key-type>0</key-type>
      <secret-key-string>WORD</secret-key-string>
    </config>
  </vrf>
</vrfs>
</tacacs>

```

## Command Syntax

```
tacacs-server login key (0|7) WORD (vrf (management|NAME) |)
```

---

## Configure key type

VRF Name associated with this instance

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: key-type

Attribute Type: enum (0|7)

Attribute Name: secret-key-string

Attribute Type: string

## Netconf edit-config payload

```

<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        <key-type>0</key-type>
        <secret-key-string>WORD</secret-key-string>
      </config>
    </vrf>
  </vrfs>
</tacacs>

```

## Command Syntax

```
tacacs-server login key (0|7) WORD (vrf (management|NAME) |)
```

---

## Configure timeout

VRF Name associated with this instance

This command is supported when following feature are enabled hostp feature,aaa feature,tacacs-client feature

Attribute Name: vrf-name

Attribute Type: string

Attribute Name: timeout

Attribute Type: uint8

Default Value: 5

Attribute Range: 1-60

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
        <timeout>1</timeout> <!-- operation="delete"-->
      </config>
    </vrf>
  </vrfs>
</tacacs>
```

### Command Syntax

```
tacacs-server login timeout <1-60> (vrf (management|NAME) |)
```

---

## Configure host address

Use this attribute to set the TACACS+ server host name or IP address

Attribute Name: host-address

Attribute Type: union

Attribute Range: 1-63

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server> <!-- operation="delete"-->
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number>
      </config>
    </server>
  </remote-servers>
</tacacs>
```

```

</vrf>
</vrfs>
</tacacs>

```

## Command Syntax

```

tacacs-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf (management|NAME)|) seq-
num <1-8>

```

---

## Configure secret key string

Shared key used between the authentication-server and the device

Attribute Name: secret-key-string

Attribute Type: string

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

Attribute Name: key-type

Attribute Type: enum (0|7)

## Netconf edit-config payload

```

<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
        <key-type>0</key-type> <!-- operation="delete"-->
      </config>
      <secret-key-string>WORD</secret-key-string> <!-- operation="delete"-->
    </server>
  </remote-servers>
</tacacs>

```

## Command Syntax

```

tacacs-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf (management|NAME)|) seq-
num <1-8> key (0|7) WORD

```

---

## Configure port

Port number used for TACACS+ Server Connection

Attribute Name: port

Attribute Type: uint32

Attribute Range: 1025-65535

Attribute Name: sequence-number

Attribute Type: uint8

Attribute Range: 1-8

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    </vrf>
  </vrfs>
  <remote-servers>
    <server>
      <host-address>A.B.C.D</host-address>
      <config>
        <host-address>A.B.C.D</host-address>
        <sequence-number>1</sequence-number> <!-- operation="delete"-->
      </config>
      <port>1025</port> <!-- operation="delete"-->
    </server>
  </remote-servers>
</tacacs>
```

### Command Syntax

```
tacacs-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf (management|NAME)|) seq-
num <1-8> port <1025-65535>
```

---

## Configure sequence number

To represent the timeout configured by the user

Attribute Name: timeout

Attribute Type: uint32

Default Value: 5

Attribute Range: 1-60

Attribute Name: sequence-number

Attribute Type: uint8



Attribute Range: 1-8

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <vrfs>
    <vrf>
      <vrf-name>management</vrf-name>
      <config>
        <vrf-name>management</vrf-name>
      </config>
    <remote-servers>
      <server>
        <host-address>A.B.C.D</host-address>
        <config>
          <host-address>A.B.C.D</host-address>
          <sequence-number>1</sequence-number> <!-- operation="delete"-->
        </config>
          <timeout>1</timeout> <!-- operation="delete"-->
        </server>
      </remote-servers>
    </vrf>
  </vrfs>
</tacacs>
```

### Command Syntax

```
tacacs-server login host (A.B.C.D|X:X::X:X|HOSTNAME) (vrf (management|NAME)|) seq-
num <1-8> timeout <1-60>
```

## Configure enable

This attribute is to enable/disable TACACS+ debug logging

Attribute Name: enable

Attribute Type: empty

### Netconf edit-config payload

```
<tacacs xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-tacacs">
  <debug>
    <config>
      </enable><!-- operation="delete"-->
    </config>
  </debug>
</tacacs>
```

### Command Syntax

```
debug tacacs+
```

## clear tacacs-server counters (vrf (management|NAME|all))

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-all-tacacs-server-counters xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-tacacs">
  <vrf-name>management</vrf-name>
</clear-all-tacacs-server-counters>
```

### Command Syntax

```
clear tacacs-server counters (vrf (management|NAME|all) |)
```

---

## clear tacacs-server (A.B.C.D|X:X::X:X|HOSTNAME) counters (vrf (management|NAME|all)|)

Attribute Name: hostname

Attribute Type: union

Attribute Name: vrf-name

Attribute Type: string

### Netconf RPC payload

```
<clear-tacacs-server-host-counters xmlns="http://www.ipinfusion.com/yang/ocnos/
ipi-tacacs">
  <hostname>A.B.C.D</hostname>
  <vrf-name>management</vrf-name>
</clear-tacacs-server-host-counters>
```

### Command Syntax

```
clear tacacs-server (A.B.C.D|X:X::X:X|HOSTNAME) counters (vrf
(management|NAME|all) |)
```

---

## debug tacacs+

### Netconf RPC payload

```
<tacacs-terminal-debug-on xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
tacacs"/>
```

### Command Syntax

```
debug tacacs+
```

---

## no debug tacacs+

### Netconf RPC payload

```
<tacacs-terminal-debug-off xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
tacacs"/>
```

### Command Syntax

```
no debug tacacs+
```

---

## IPI-TIME-RANGE

---

### Configure name

Time range name to be configured

Attribute Name: name

Attribute Type: string

Attribute Range: 1-60

### Netconf edit-config payload

```
<time-ranges xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-time-range">
  <time-range> <!-- operation="delete"-->
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  </time-range>
</time-ranges>
```

### Command Syntax

```
time-range WORD
```

---

## Configure absolute start time

Start time hour and minute

Attribute Name: absolute-start-time

Attribute Type: string

### Netconf edit-config payload

```
<time-ranges xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-time-range">
  <time-range>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  <start-time-options>
    <config>
      <absolute-start-time>TIME_RANGE_DATE_TIME_T</absolute-start-time>
    </config>
  </start-time-options>
</time-range>
</time-ranges>
```

### Command Syntax

```
start-time HH:MM:SS <01-31> MONTH <1995-2035>
```

---

## Configure relative start time

Configure the start-time of the time-range to be now or after sometime

Attribute Name: relative-start-time

Attribute Type: union

### Netconf edit-config payload

```
<time-ranges xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-time-range">
  <time-range>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  <start-time-options>
    <config>
      <relative-start-time>TIME_RANGE_RELATIVE_TIME_T</relative-start-time>
    </config>
  </start-time-options>
</time-range>
</time-ranges>
```

### Command Syntax

```
start-time (after (<1-129600>) | now)
```

---

## Configure absolute end time

End time hour and minute

Attribute Name: absolute-end-time

Attribute Type: string

### Netconf edit-config payload

```
<time-ranges xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-time-range">
  <time-range>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  <end-time-options>
    <config>
      <absolute-end-time>TIME_RANGE_DATE_TIME_T</absolute-end-time>
    </config>
  </end-time-options>
</time-range>
</time-ranges>
```

### Command Syntax

```
end-time HH:MM:SS <01-31> MONTH <1995-2035>
```

---

## Configure relative end time

Relative time in minutes

Attribute Name: relative-end-time

Attribute Type: string

### Netconf edit-config payload

```
<time-ranges xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-time-range">
  <time-range>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  </time-range>
</time-ranges>
```

### Command Syntax

```
end-time after <1-129600>
```

---

## Configure frequency

Frequency (hourly, daily, weekly)

Attribute Name: frequency

Attribute Type: union

### Netconf edit-config payload

```
<time-ranges xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-time-range">
  <time-range>
    <name>WORD</name>
    <config>
      <name>WORD</name>
    </config>
  </time-range>
</time-ranges>
```

### Command Syntax

```
frequency (daily|hourly|weekly|days WORD)
```

---

## crypto pki generate rsa common-name ipv4 IPv4ADDR

Attribute Name: ipv4-addr

Attribute Type: inet:ipv4-address

### Netconf RPC payload

```
<crypto-rsa-key-gen xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-crypto">
  <ipv4-addr>IPv4ADDR</ipv4-addr>
</crypto-rsa-key-gen>
```

### Command Syntax

```
crypto pki generate rsa common-name ipv4 IPv4ADDR
```

---

## IPI-IP-SLA

---

### Configure identifier

Use this attribute to set the IPSLA.

Attribute Name: identifier

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf edit-config payload

```
<ip-sla xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <processes>
    <process> <!-- operation="delete"-->
      <identifier>1</identifier>
      <config>
        <identifier>1</identifier>
      </config>
    </process>
  </processes>
</ip-sla>
```

### Command Syntax

```
ip sla <1-65535>
```

---

## Configure host

Use this attribute to set the ICMP Echo host name or IP address.

Attribute Name: host

Attribute Type: union

Attribute Name: source-interface

Attribute Type: string

**Netconf edit-config payload**

```

<ip-sla xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <processes>
    <process>
      <identifier>1</identifier>
      <config>
        <identifier>1</identifier>
      </config>
    <icmp-echo-processes>
    <icmp-echo-process> <!-- operation="delete"-->
      <host>IP_SLA_HOSTNAME_T</host>
      <config>
        <host>IP_SLA_HOSTNAME_T</host>
        <source-interface>IFNAME</source-interface>
      </config>
    </icmp-echo-process>
  </icmp-echo-processes>
</process>
</processes>
</ip-sla>

```

**Command Syntax**

```
icmp-echo (ipv4 A.B.C.D|ipv6 X:X::X:X|HOSTNAME) (source-interface IFNAME|)
```

---

**Configure frequency**

The frequency (interval) correlates to how often the ICMP packet is sent. The unit of this parameter is in seconds.

Attribute Name: frequency

Attribute Type: uint8

Attribute Range: 1-60

**Netconf edit-config payload**

```

<ip-sla xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <processes>
    <process>
      <identifier>1</identifier>
      <config>
        <identifier>1</identifier>
      </config>
    <icmp-echo-processes>
    <icmp-echo-process>
      <host>IP_SLA_HOSTNAME_T</host>
      <config>
        <host>IP_SLA_HOSTNAME_T</host>
        <frequency>1</frequency> <!-- operation="delete"-->
      </config>
    </icmp-echo-process>
  </icmp-echo-processes>

```

```
</process>
</processes>
</ip-sla>
```

## Command Syntax

```
frequency <1-60>
```

---

## Configure timeout

The timeout value correlates to how long the Ping application will wait for the response after sending packets ICMP Echo packets.

Attribute Name: timeout

Attribute Type: uint16

Attribute Range: 1000-60000

## Netconf edit-config payload

```
<ip-sla xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <processes>
    <process>
      <identifier>1</identifier>
      <config>
        <identifier>1</identifier>
      </config>
    <icmp-echo-processes>
      <icmp-echo-process>
        <host>IP_SLA_HOSTNAME_T</host>
        <config>
          <host>IP_SLA_HOSTNAME_T</host>
          <timeout>1000</timeout> <!-- operation="delete"-->
        </config>
      </icmp-echo-process>
    </icmp-echo-processes>
  </process>
</processes>
</ip-sla>
```

## Command Syntax

```
timeout <1000-60000>
```

---

## Configure threshold

The threshold value correlates to the limit the administrator sets as what would be a successful test. Threshold can be configured in milli-seconds.

Attribute Name: threshold

Attribute Type: uint16

Attribute Range: 1000-60000



**Netconf edit-config payload**

```

<ip-sla xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <processes>
    <process>
      <identifier>1</identifier>
      <config>
        <identifier>1</identifier>
      </config>
    <icmp-echo-processes>
    <icmp-echo-process>
      <host>IP_SLA_HOSTNAME_T</host>
      <config>
        <host>IP_SLA_HOSTNAME_T</host>
      </config>
      <threshold>1000</threshold> <!-- operation="delete"-->
    </icmp-echo-process>
  </icmp-echo-processes>
</process>
</processes>
</ip-sla>

```

**Command Syntax**

```
threshold <1000-60000>
```

---

**Configure vrf name**

VRF name

Attribute Name: vrf-name

Attribute Type: string

**Netconf edit-config payload**

```

<ip-sla xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <scheduled-processes>
    <scheduled-process>
      <time-range-name>WORD</time-range-name>
      <config>
        <time-range-name>WORD</time-range-name>
        <scheduled-pid>1</scheduled-pid>
      </config>
      <scheduled-pid>1</scheduled-pid>
      <vrf-name>NAME</vrf-name>
    </scheduled-process>
  </scheduled-processes>
</ip-sla>

```

**Command Syntax**

```
ip sla schedule <1-65535> time-range WORD (vrf NAME|)
```

---

## clear ip sla statistics (<1-65535>|)

Attribute Name: identifier

Attribute Type: uint16

Attribute Range: 1-65535

### Netconf RPC payload

```
<ip-sla-clear-statistics xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ip-sla">
  <identifier>1</identifier>
</ip-sla-clear-statistics>
```

### Command Syntax

```
clear ip sla statistics (<1-65535>|)
```

---

## IPI-OBJECT-TRACKING

---

### Configure tracker id

Use this attribute for Object Tracking id.

Attribute Name: tracker-id

Attribute Type: uint16

Attribute Name: delay-up

Attribute Type: uint16

Attribute Range: 1-9999

### Netconf edit-config payload

```
<object-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-object-tracking">
  <trackers>
    <tracker>
      <tracker-id>1</tracker-id>
      <config>
        <tracker-id>1</tracker-id>
        <delay-up>1</delay-up>
      </config>
    </tracker>
  </trackers>
</object-tracking>
```

### Command Syntax

```
delay up <1-9999>
```

---

### Configure delay down

Use this attribute for Object Tracking id.

Attribute Name: tracker-id

Attribute Type: uint16

Attribute Name: delay-down

Attribute Type: uint16

Attribute Range: 1-9999

### Netconf edit-config payload

```
<object-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-object-tracking">
  <trackers>
    <tracker>
      <tracker-id>1</tracker-id>
      <config>
        <tracker-id>1</tracker-id>
        <delay-down>1</delay-down>
      </config>
    </tracker>
  </trackers>
</object-tracking>
```

### Command Syntax

```
delay down <1-9999>
```

---

## Configure delay up

Use this attribute for Object Tracking id.

Attribute Name: tracker-id

Attribute Type: uint16

Attribute Name: delay-up

Attribute Type: uint16

Attribute Range: 1-9999

Attribute Name: delay-down

Attribute Type: uint16

Attribute Range: 1-9999

### Netconf edit-config payload

```
<object-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-object-tracking">
  <trackers>
    <tracker>
      <tracker-id>1</tracker-id>
      <config>
        <tracker-id>1</tracker-id>
        <delay-up>1</delay-up>
        <delay-down>1</delay-down>
      </config>
    </tracker>
  </trackers>
</object-tracking>
```

```
</trackers>
</object-tracking>
```

## Command Syntax

```
delay up <1-9999> down <1-9999>
```

---

## Configure select option

object tracking options

Attribute Name: select-option

Attribute Type: enum (all|any)

### Netconf edit-config payload

```
<object-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-object-tracking">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
  <select-option>all</select-option> <!-- operation="delete"-->
</interface>
</interfaces>
</object-tracking>
```

## Command Syntax

```
object-tracking (all|any)
```

---

## Configure track id

Use this attribute for Object Tracking id.

Attribute Name: track-id

Attribute Type: uint32

Attribute Range: 1-500

### Netconf edit-config payload

```
<object-tracking xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-object-tracking">
<interfaces>
<interface>
  <name>WORD</name>
  <config>
    <name>WORD</name>
  </config>
<track-interfaces>
<track-interface> <!-- operation="delete"-->
  <track-id>1</track-id>
  <config>
```

```

        <track-id>1</track-id>
    </config>
</track-interface>
</track-interfaces>
</interface>
</interfaces>
</object-tracking>

```

### Command Syntax

```
object-tracking <1-500>
```

---

## IPI-ELK

---

### Configure password

Use this to configure ELK server password

Attribute Name: password

Attribute Type: string

Attribute Name: username

Attribute Type: string

### Netconf edit-config payload

```

<elk xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-elk">
  <metricbeats>
    <metricbeat>
      <ip>A.B.C.D</ip>
      <config>
        <ip>A.B.C.D</ip>
        <username>USERNAME</username> <!-- operation="delete"-->
      </config>
      <password>PASSWORD</password> <!-- operation="delete"-->
    </metricbeat>
  </metricbeats>
</elk>

```

### Command Syntax

```
elk server metricbeat A.B.C.D username USERNAME password PASSWORD
```

---

### Configure certificate path

Used to configure Filebeat server path to certificate file

Attribute Name: certificate-path

Attribute Type: string

**Netconf edit-config payload**

```
<elk xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-elk">
  <filebeats>
    <filebeat>
      <ip>A.B.C.D</ip>
      <config>
        <ip>A.B.C.D</ip>
      </config>
      <certificate-path>FILE-PATH</certificate-path> <!-- operation="delete"-->
    </filebeat>
  </filebeats>
</elk>
```

**Command Syntax**

```
elk server filebeat A.B.C.D FILE-PATH
```

---

**service enable metricbeat (vrf management|)**

Attribute Name: vrf-name

Attribute Type: string

**Netconf RPC payload**

```
<elk-metricbeat-service-enable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
elk">
  <vrf-name>management</vrf-name>
</elk-metricbeat-service-enable>
```

**Command Syntax**

```
service enable metricbeat (vrf management|)
```

---

**service enable filebeat (vrf management|)**

Attribute Name: vrf-name

Attribute Type: string

**Netconf RPC payload**

```
<elk-filebeat-service-enable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
elk">
  <vrf-name>management</vrf-name>
</elk-filebeat-service-enable>
```

**Command Syntax**

```
service enable filebeat (vrf management|)
```

---

**service disable metricbeat (vrf management|)**

Attribute Name: vrf-name

Attribute Type: string

**Netconf RPC payload**

```
<elk-metricbeat-service-disable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
elk">
  <vrf-name>management</vrf-name>
</elk-metricbeat-service-disable>
```

**Command Syntax**

```
service disable metricbeat (vrf management|)
```

---

**service disable filebeat (vrf management|)**

Attribute Name: vrf-name

Attribute Type: string

**Netconf RPC payload**

```
<elk-filebeat-service-disable xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-
elk">
  <vrf-name>management</vrf-name>
</elk-filebeat-service-disable>
```

**Command Syntax**

```
service disable filebeat (vrf management|)
```

---

**IPI-IPSEC**

---

**Configure transform set name**

IPsec transform-set name

This command is supported when following feature are enabled IPsec feature

Attribute Name: transform-set-name

Attribute Type: string

Attribute Range: 1-127

**Netconf edit-config payload**

```
<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <transform-sets>
    <transform-set> <!-- operation="delete"-->
      <transform-set-name>NAME</transform-set-name>
      <config>
        <transform-set-name>NAME</transform-set-name>
      </config>
    </transform-set>
  </transform-sets>
</ipsec>
```

## Command Syntax

```
crypto ipsec transform-set NAME
```

---

## Configure transform set mode

This attribute is used to configure mode for a transform-set.

This command is supported when following feature are enabled IPsec feature

Attribute Name: transform-set-mode

Attribute Type: enum (transport)

Default Value: transport

## Netconf edit-config payload

```
<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <transform-sets>
    <transform-set>
      <transform-set-name>NAME</transform-set-name>
      <config>
        <transform-set-name>NAME</transform-set-name>
      </config>
      <transform-set-mode>transport</transform-set-mode> <!-- operation="delete"-->
    </transform-set>
  </transform-sets>
</ipsec>
```

## Command Syntax

```
crypto ipsec transform-set NAME mode (transport)
```

---

## Configure ah authentication

This attribute configures IPsec AH authentication type.

This command is supported when following feature are enabled IPsec feature

Attribute Name: ah-authentication

Attribute Type: enum (none|ah-md5|ah-sha1|ah-sha256|ah-sha384|ah-sha512)

## Netconf edit-config payload

```
<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <transform-sets>
    <transform-set>
      <transform-set-name>NAME</transform-set-name>
      <config>
        <transform-set-name>NAME</transform-set-name>
      </config>
    <ah-auth>
      <config>
        <ah-authentication>none</ah-authentication> <!-- operation="delete"-->
      </config>
    </ah-auth>
  </transform-sets>
</ipsec>
```



```

</ah-auth>
</transform-set>
</transform-sets>
</ipsec>

```

## Command Syntax

```
crypto ipsec transform-set NAME ah (none|ah-md5|ah-sha1|ah-sha256|ah-sha384|ah-sha512)
```

---

## Configure esp encryption

This attribute configures IPsec ESP encryption type.

This command is supported when following feature are enabled IPsec feature

Attribute Name: esp-encryption

Attribute Type: enum (esp-null|esp-3des|esp-cast|esp-blf|esp-blf192|esp-blf256|esp-aes|esp-aes192|esp-aes256)

Attribute Name: esp-authentication

Attribute Type: enum (none|esp-md5|esp-sha1|esp-sha256|esp-sha384|esp-sha512)

## Netconf edit-config payload

```

<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <transform-sets>
    <transform-set>
      <transform-set-name>NAME</transform-set-name>
      <config>
        <transform-set-name>NAME</transform-set-name>
      </config>
    <esp-auth>
      <config>
        <esp-authentication>none</esp-authentication>
        <esp-encryption>esp-null</esp-encryption>
      </config>
    </esp-auth>
  </transform-set>
</transform-sets>
</ipsec>

```

## Command Syntax

```
crypto ipsec transform-set NAME esp-auth (none|esp-md5|esp-sha1|esp-sha256|esp-sha384|esp-sha512) esp-enc (esp-null|esp-3des|esp-cast|esp-blf|esp-blf192|esp-blf256|esp-aes|esp-aes192|esp-aes256)
```

---

## Configure esp authentication

This attribute configures IPsec ESP authentication type.

This command is supported when following feature are enabled IPsec feature

Attribute Name: esp-authentication

Attribute Type: enum (none|esp-md5|esp-sha1|esp-sha256|esp-sha384|esp-sha512)

Attribute Name: esp-encryption

Attribute Type: enum (esp-null|esp-3des|esp-cast|esp-blf|esp-blf192|esp-blf256|esp-aes|esp-aes192|esp-aes256)

### Netconf edit-config payload

```
<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <transform-sets>
    <transform-set>
      <transform-set-name>NAME</transform-set-name>
      <config>
        <transform-set-name>NAME</transform-set-name>
      </config>
    <esp-auth>
      <config>
        <esp-encryption>esp-null</esp-encryption>
        <esp-authentication>none</esp-authentication>
      </config>
    </esp-auth>
  </transform-set>
</transform-sets>
</ipsec>
```

### Command Syntax

```
crypto ipsec transform-set NAME esp-auth (none|esp-md5|esp-sha1|esp-sha256|esp-
sha384|esp-sha512) esp-enc (esp-null|esp-3des|esp-cast|esp-blf|esp-blf192|esp-
blf256|esp-aes|esp-aes192|esp-aes256)
```

---

## Configure name

IPsec Crypto Map name

This command is supported when following feature are enabled IPsec feature

Attribute Name: name

Attribute Type: string

Attribute Range: 1-127

Attribute Name: sa-type

Attribute Type: enum (ipsec-manual)

### Netconf edit-config payload

```
<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <crypto-maps>
    <crypto-map> <!-- operation="delete"-->
      <name>MAP-NAME</name>
      <config>
        <name>WORD</name>
        <sa-type>ipsec-manual</sa-type>
      </config>
    </crypto-map>
  </crypto-maps>
```

---

```
</ipsec>
```

## Command Syntax

```
crypto map MAP-NAME (ipsec-manual)
```

---

## Configure sequence id

Map sequence-id

This command is supported when following feature are enabled IPsec feature

Attribute Name: sequence-id

Attribute Type: uint16

Attribute Range: 1-65535

## Netconf edit-config payload

```
<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <crypto-maps>
    <crypto-map>
      <name>MAP-NAME</name>
      <config>
        <name>WORD</name>
      </config>
    <sessions>
      <session> <!-- operation="delete"-->
        <sequence-id>1</sequence-id>
        <config>
          <sequence-id>1</sequence-id>
        </config>
      </session>
    </sessions>
  </crypto-map>
</crypto-maps>
</ipsec>
```

## Command Syntax

```
sequence <1-65535>
```

---

## Configure peer

Map session peer IP address

This command is supported when following feature are enabled IPsec feature

Attribute Name: peer

Attribute Type: inet:ip-address

Attribute Name: spi

Attribute Type: uint16

**Netconf edit-config payload**

```

<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <crypto-maps>
    <crypto-map>
      <name>MAP-NAME</name>
      <config>
        <name>WORD</name>
      </config>
    </crypto-map>
  </crypto-maps>
  <sessions>
    <session>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <peer-addresses>
        <peer-address> <!-- operation="delete"-->
          <peer>A.B.C.D</peer>
          <config>
            <peer>CML_IP_ADDR_T</peer>
            <spi>0</spi>
          </config>
        </peer-address>
      </peer-addresses>
    </session>
  </sessions>
</ipsec>

```

**Command Syntax**

```
set peer (A.B.C.D|X:X::X:X) (spi <0-4096>|)
```

**Configure security parameter index**

Crypto Map session key security parameter index (SPI)

This command is supported when following feature are enabled IPsec feature

Attribute Name: security-parameter-index

Attribute Type: uint16

Attribute Range: 0-4096

Attribute Name: cipher

Attribute Type: string

Attribute Range: 1-128

Attribute Name: authentication-key

Attribute Type: string

Attribute Range: 1-32

**Netconf edit-config payload**

```

<ipsec xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-ipsec">
  <crypto-maps>
    <crypto-map>
      <name>MAP-NAME</name>
      <config>
        <name>WORD</name>
      </config>
    </crypto-map>
  </crypto-maps>
  <sessions>
    <session>
      <sequence-id>1</sequence-id>
      <config>
        <sequence-id>1</sequence-id>
      </config>
      <session-keys>
        <session-key> <!-- operation="delete"-->
          <security-parameter-index>0</security-parameter-index>
          <config>
            <security-parameter-index>0</security-parameter-index>
            <protocol>esp</protocol>
            <direction>inbound</direction>
            <cipher>HEX-KEY-DATA</cipher>
            <authentication-key>HEX-KEY-DATA</authentication-key>
          </config>
          <protocol>esp</protocol>
          <direction>inbound</direction>
        </session-key>
      </session-keys>
    </session>
  </sessions>
</ipsec>

```

**Command Syntax**

```

set session-key (inbound|outbound) (esp) <0-4096> cipher HEX-KEY-DATA authenticator
HEX-KEY-DATA

```

---

**IPI-HOST**

---

**Configure disable service advanced vty**

Use this attribute to enable advanced mode vty interface.

Attribute Name: disable-service-advanced-vty

Attribute Type: uint8

**Netconf edit-config payload**

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
  <config>
    </disable-service-advanced-vty><!-- operation="delete"-->
  </config>
</system-host>
```

**Command Syntax**

```
no service advanced-vty
```

---

**Configure service passwd encryption**

Use this attribute to enable password encryption.

Attribute Name: service-passwd-encryption

Attribute Type: boolean

Default Value: true

**Netconf edit-config payload**

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
  <config>
    <service-passwd-encryption>true</service-passwd-encryption> <!--
operation="delete"-->
  </config>
</system-host>
```

**Command Syntax**

```
service password-encryption
```

---

**Configure passwd encrypted**

Use this attribute to provide encrypted password.

Attribute Name: passwd-encrypted

Attribute Type: uint8

Attribute Name: system-enable-passwd

Attribute Type: string

**Netconf edit-config payload**

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
  <config>
    <system-enable-passwd>LINE</system-enable-passwd> <!-- operation="delete"-->
    </passwd-encrypted><!-- operation="delete"-->
  </config>
</system-host>
```

**Command Syntax**

```
enable password (8|) LINE
```

---

## Configure banner motd

Use this attribute to set the login banner for the OcNOS device.

This command is supported when following feature are enabled IMI feature

Attribute Name: banner-motd

Attribute Type: union

### Netconf edit-config payload

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
  <config>
    <banner-motd>CML_BANNER_T</banner-motd>
  </config>
</system-host>
```

### Command Syntax

```
banner motd (LINE|default)
```

---

## Configure banner motd file

Use this attribute to set the filename containing the banner message

This command is supported when following feature are enabled IMI feature

Attribute Name: banner-motd-file

Attribute Type: string

### Netconf edit-config payload

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
  <config>
    <banner-motd-file>FILENAME</banner-motd-file> <!-- operation="delete"-->
  </config>
</system-host>
```

### Command Syntax

```
banner motd file FILENAME
```

---

## Configure service term length

Use this attribute to set system wide terminal length.

This command is supported when following feature are enabled IMI feature

Attribute Name: service-term-length

Attribute Type: uint16

Attribute Range: 0-512

### Netconf edit-config payload

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
  <config>
```

```
<service-term-length>0</service-term-length> <!-- operation="delete"-->
</config>
</system-host>
```

### Command Syntax

```
service terminal-length <0-512>
```

---

## Configure disable default autoenable

Use this attribute to disable auto enable feature based on the user role which is happening by default for remote authentication.

This command is supported when following feature are enabled IMI feature

Attribute Name: disable-default-autoenable

Attribute Type: empty

### Netconf edit-config payload

```
<system-host xmlns="http://www.ipinfusion.com/yang/ocnos/ipi-host">
<config>
  </disable-default-autoenable><!-- operation="delete"-->
</config>
</system-host>
```

### Command Syntax

```
disable default auto-enable
```



## CHAPTER 2 PYANG Tree

### module: ipi-aaa

```

+--rw aaa
  +--rw vrfs
    | +--rw vrf* [vrf-name]
    |   +--rw vrf-name      -> ../config/vrf-name
    |   +--rw config
    |   | +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    |   | +--rw authentication-method-rule? cml-data-types:cml_line_t
    |   | +--rw accounting-method-rule?    cml-data-types:cml_line_t
    |   | +--rw authorization-method-rule? cml-data-types:cml_line_t
    |   | +--rw enable-fallback?          empty
    |   | +--rw non-existent?             boolean
    |   | +--rw error-enable?             empty
    |   | +--ro state
    |   | +--ro vrf-name?                 -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    |   | +--ro authentication-method-rule? cml-data-types:cml_line_t
    |   | +--ro accounting-method-rule?    cml-data-types:cml_line_t
    |   | +--ro authorization-method-rule? cml-data-types:cml_line_t
    |   | +--ro enable-fallback?          empty
    |   | +--ro non-existent?             boolean
    |   | +--ro error-enable?             empty
    |   +--rw server-groups
    |       +--rw server-group* [group-type group-name]
    |           +--rw group-type      -> ../config/group-type
    |           +--rw group-name      -> ../config/group-name
    |           +--rw config
    |               +--rw group-type? ipi-aaa-types:aaa_server_grp_type_t
    |               +--rw group-name? string
    |           +--ro state

```

```
|      | +--ro group-type?  ipi-aaa-types:aaa_server_grp_type_t
|      | +--ro group-name?  string
|      +--rw server-addresses
|          +--rw server-address* [host-address]
|              +--rw host-address  -> ../config/host-address
|              +--rw config
|                  | +--rw host-address?  cml-data-types:cml_hostname_t
|                  +--ro state
|                      +--ro host-address?  cml-data-types:cml_hostname_t
+--rw aaa-authentication-console
| +--rw config
| | +--rw authentication-method-rule?  cml-data-types:cml_line_t
| | +--rw enable-fallback?             boolean
| | +--rw authorization-method-rule?  cml-data-types:cml_line_t
| | +--rw accounting-method-rule?     cml-data-types:cml_line_t
| | +--rw user-non-existent?          boolean
| +--ro state
|   +--ro authentication-method-rule?  cml-data-types:cml_line_t
|   +--ro enable-fallback?             boolean
|   +--ro authorization-method-rule?  cml-data-types:cml_line_t
|   +--ro accounting-method-rule?     cml-data-types:cml_line_t
|   +--ro user-non-existent?          boolean
+--rw aaa-user
| +--rw config
| | +--rw authentication-max-failure-attempts?  uint8
| | +--rw local-user-unlock-timeout?            uint16
| +--ro state
| | +--ro authentication-max-failure-attempts?  uint8
| | +--ro local-user-unlock-timeout?            uint16
| +--rw password-policy
|   +--rw config
|   | +--rw enable?          empty
|   | +--rw numeric-count?   uint8
|   | +--rw uppercase-count? uint8
|   | +--rw lowercase-count? uint8
|   | +--rw special-count?   uint8
```

---

```
| | +--rw history?      uint16
| | +--rw maxsequence?  uint8
| | +--rw disable-usercheck? empty
| | +--rw maxrepeat?    uint8
| | +--rw min-length?   uint8
| +--ro state
| | +--ro enable?       empty
| | +--ro numeric-count? uint8
| | +--ro uppercase-count? uint8
| | +--ro lowercase-count? uint8
| | +--ro special-count? uint8
| | +--ro history?      uint16
| | +--ro maxsequence?  uint8
| | +--ro disable-usercheck? empty
| | +--ro maxrepeat?    uint8
| | +--ro min-length?   uint8
| +--rw role-expdays
| | +--rw role-expday* [role]
| |   +--rw role    -> ../config/role
| |   +--rw config
| |     | +--rw expire? uint16
| |     | +--rw role?   ipi-user-management-types:user_mgmt_role_types_t
| |     | +--rw user?   string
| |     +--ro state
| |       +--ro expire? uint16
| |       +--ro role?   ipi-user-management-types:user_mgmt_role_types_t
| |       +--ro user?   string
| +--rw user-expdays
|   +--rw user-expday* [user]
|     +--rw user    -> ../config/user
|     +--rw config
|       | +--rw expire? uint16
|       | +--rw role?   ipi-user-management-types:user_mgmt_role_types_t
|       | +--rw user?   string
|       +--ro state
|         +--ro expire? uint16
```

---

```

|      +--ro role?   ipi-user-management-types:user_mgmt_role_types_t
|      +--ro user?   string
+--rw debug
  +--rw config
    | +--rw enable?   empty
  +--ro state
    +--ro enable?      empty
    +--ro terminal-debug-status? cml-data-types:cml_on_off_t

```

rpcs:

```

+---x aaa-terminal-debug-on {feature-list:HAVE_HOSTPD,feature-list:HAVE_AAA}?
+---x aaa-terminal-debug-off {feature-list:HAVE_HOSTPD,feature-list:HAVE_AAA}?
+---x aaa-clear-local-user-lockout {feature-list:HAVE_AAA}?
  +---w input
    +---w username   string

```

---

## module: ipi-acl

```

+--rw acl
  +--rw acl-sets
    | +--rw acl-set* [name type]
    |   +--rw name      -> ../config/name
    |   +--rw type      -> ../config/type
    |   +--rw config
    |     | +--rw name?          string
    |     | +--rw type?          ipi-acl-types:acl_types_t
    |     | +--rw description?    cml-data-types:cml_line_t
    |     | +--rw ipv6-disable-default-icmpv6-rule? empty
    |     +--ro state
    |       | +--ro name?          string

```

---

```

| | +--ro type?                ipi-acl-types:acl_types_t
| | +--ro description?         cml-data-types:cml_line_t
| | +--ro ipv6-disable-default-icmpv6-rule? empty
| +--rw default-actions
| | +--rw config
| | | +--rw forwarding-action-default? ipi-acl-types:acl_default_forwarding_action_t
| | | +--rw monitor-action-default?   ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | +--ro state
| |   +--ro counters
| |     +--ro matched-packets? yang:counter64
| |   +--ro forwarding-action-default? ipi-acl-types:acl_default_forwarding_action_t
| |   +--ro monitor-action-default?   ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| +--rw acl-entries
| | +--rw acl-entry* [sequence-id]
| |   +--rw sequence-id -> ../config/sequence-id
| |   +--rw config
| |     +--rw sequence-id? uint32
| |     +--ro state
| |       +--ro sequence-id? uint32
| |     +--rw ipv4
| |       +--rw config
| |         +--rw forwarding-action?      ipi-acl-types:acl_forwarding_action_t
| |         +--rw vlan-id?                uint16
| |         +--rw monitor-action?         ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| |         +--rw source-address?         ipi-acl-types:acl_any_ipv4_src_addr_t
| |         +--rw destination-address?    ipi-acl-types:acl_any_ipv4_dest_addr_t
| |         +--rw dscp?                   ipi-acl-types:acl_dscp_t
| |         +--rw precedence?             ipi-acl-types:acl_precedence_t
| |         +--rw inner-vlan-id?          uint16
| |         +--rw (protocol)?
| |           +--:(tcp)
| |             +--rw protocol-tcp?      empty
| |             +--rw tcp-source-port?   ipi-acl-types:acl_tcp_src_port_t
| |             +--rw tcp-destination-port? ipi-acl-types:acl_tcp_dest_port_t

```

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```

| | | | +--rw tcp-flags?          ipi-acl-types:acl_tcp_flags_t
| | | | +--:(udp)
| | | | +--rw protocol-udp?       empty
| | | | +--rw udp-source-port?    ipi-acl-types:acl_udp_src_port_t
| | | | +--rw udp-destination-port? ipi-acl-types:acl_udp_dest_port_t
| | | | +--:(icmp)
| | | | +--rw protocol-icmp?      empty
| | | | +--rw icmp-message?       ipi-acl-types:acl_icmp_options_t {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--rw icmp-type?          uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--rw icmp-code?          uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--:(other-protocols)
| | | |   +--rw protocol-name?     ipi-acl-types:acl_ip_protocols_t
| | | |   +--rw source-port-operator? ipi-acl-types:acl_src_port_operations_t
| | | |   +--rw lower-source-port-in-range? uint16
| | | |   +--rw upper-source-port-in-range? uint16
| | | |   +--rw destination-port-operator? ipi-acl-types:acl_dest_port_operations_t
| | | |   +--rw lower-destination-port-in-range? uint16
| | | |   +--rw upper-destination-port-in-range? uint16
| | | |   +--rw redirect-interface-name? string {feature-list:HAVE_CUSTOM1_ACL}?
| | | |   +--rw fragments?         empty {feature-list:HAVE_CUSTOM1_ACL}?
| | | +--ro state
| | | +--ro counters
| | | | +--ro matched-packets? yang:counter64
| | | | +--ro forwarding-action?   ipi-acl-types:acl_forwarding_action_t
| | | | +--ro vlan-id?             uint16
| | | | +--ro monitor-action?      ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | | | +--ro source-address?      ipi-acl-types:acl_any_ipv4_src_addr_t
| | | | +--ro destination-address? ipi-acl-types:acl_any_ipv4_dest_addr_t
| | | | +--ro dscp?               ipi-acl-types:acl_dscp_t
| | | | +--ro precedence?         ipi-acl-types:acl_precedence_t
| | | | +--ro inner-vlan-id?       uint16
| | | | +--ro (protocol)?
| | | | +--:(tcp)
| | | | | +--ro protocol-tcp?      empty
| | | | | +--ro tcp-source-port?   ipi-acl-types:acl_tcp_src_port_t
| | | | | +--ro tcp-destination-port? ipi-acl-types:acl_tcp_dest_port_t

```

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```

| | | | +--ro tcp-flags?          ipi-acl-types:acl_tcp_flags_t
| | | | +--:(udp)
| | | | +--ro protocol-udp?       empty
| | | | +--ro udp-source-port?     ipi-acl-types:acl_udp_src_port_t
| | | | +--ro udp-destination-port? ipi-acl-types:acl_udp_dest_port_t
| | | | +--:(icmp)
| | | | +--ro protocol-icmp?       empty
| | | | +--ro icmp-message?        ipi-acl-types:acl_icmp_options_t {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--ro icmp-type?           uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--ro icmp-code?           uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--:(other-protocols)
| | | |   +--ro protocol-name?      ipi-acl-types:acl_ip_protocols_t
| | | |   +--ro source-port-operator? ipi-acl-types:acl_src_port_operations_t
| | | |   +--ro lower-source-port-in-range? uint16
| | | |   +--ro upper-source-port-in-range? uint16
| | | |   +--ro destination-port-operator? ipi-acl-types:acl_dest_port_operations_t
| | | |   +--ro lower-destination-port-in-range? uint16
| | | |   +--ro upper-destination-port-in-range? uint16
| | | |   +--ro redirect-interface-name? string {feature-list:HAVE_CUSTOM1_ACL}?
| | | |   +--ro fragments?          empty {feature-list:HAVE_CUSTOM1_ACL}?
| | | +--rw fragment-actions {feature-list:HAVE_CUSTOM1_ACL}?
| | |   +--rw config
| | |   +--rw fragment-forwarding-action? ipi-acl-types:acl_fragment_forwarding_action_t {feature-
list:HAVE_CUSTOM1_ACL}?
| | |   +--rw fragment-monitor-action?   ipi-acl-types:acl_monitor_action_t {feature-
list:HAVE_SFLOW,feature-list:HAVE_CUSTOM1_ACL}?
| | |   +--ro state
| | |   +--ro fragment-forwarding-action? ipi-acl-types:acl_fragment_forwarding_action_t {feature-
list:HAVE_CUSTOM1_ACL}?
| | |   +--ro fragment-monitor-action?   ipi-acl-types:acl_monitor_action_t {feature-
list:HAVE_SFLOW,feature-list:HAVE_CUSTOM1_ACL}?
| | +--rw ipv6 {feature-list:HAVE_IPV6}?
| |   +--rw config
| |   +--rw forwarding-action?          ipi-acl-types:acl_forwarding_action_t
| |   +--rw vlan-id?                   uint16
| |   +--rw monitor-action?             ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| |   +--rw source-address?             ipi-acl-types:acl_any_ipv6_src_addr_t

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```

| | | | +--rw destination-address?      ipi-acl-types:acl_any_ipv6_dest_addr_t
| | | | +--rw dscp?                     ipi-acl-types:acl_dscp_t
| | | | +--rw inner-vlan-id?            uint16 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--rw flow-label?               uint32 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--rw (protocol)?
| | | | | +--:(tcp)
| | | | | | +--rw protocol-tcp?         empty
| | | | | | +--rw tcp-source-port?      ipi-acl-types:acl_tcp_src_port_t
| | | | | | +--rw tcp-destination-port? ipi-acl-types:acl_tcp_dest_port_t
| | | | | | +--rw tcp-flags?            ipi-acl-types:acl_tcp_flags_t {feature-list:HAVE_CUSTOM1_ACL}?
| | | | | | +--:(udp)
| | | | | | +--rw protocol-udp?         empty
| | | | | | +--rw udp-source-port?      ipi-acl-types:acl_udp_src_port_t
| | | | | | +--rw udp-destination-port? ipi-acl-types:acl_udp_dest_port_t
| | | | | | +--:(icmp)
| | | | | | +--rw protocol-icmp?        empty
| | | | | | +--rw icmp-message?          ipi-acl-types:acl_icmpv6_options_t {feature-
list:HAVE_CUSTOM1_ACL}?
| | | | | | +--rw icmp-type?            uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | | | +--rw icmp-code?            uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | | | +--:(sctp)
| | | | | | +--rw protocol-sctp?        empty
| | | | | | +--rw sctp-source-port?      uint16
| | | | | | +--rw sctp-destination-port? uint16
| | | | | | +--:(other-protocols)
| | | | | | +--rw protocol-name?        ipi-acl-types:acl_ipv6_protocols_t
| | | | +--rw source-port-operator?      ipi-acl-types:acl_src_port_operations_t
| | | | +--rw lower-source-port-in-range? uint16
| | | | +--rw upper-source-port-in-range? uint16
| | | | +--rw destination-port-operator? ipi-acl-types:acl_dest_port_operations_t
| | | | +--rw lower-destination-port-in-range? uint16
| | | | +--rw upper-destination-port-in-range? uint16
| | | | +--rw redirect-interface-name?   string {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--rw fragments?                empty {feature-list:HAVE_CUSTOM1_ACL}?
| | | +--ro state
| | | +--ro counters
| | | | +--ro matched-packets?          yang:counter64

```

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```

| | | | +--ro forwarding-action?      ipi-acl-types:acl_forwarding_action_t
| | | | +--ro vlan-id?                uint16
| | | | +--ro monitor-action?         ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | | | +--ro source-address?         ipi-acl-types:acl_any_ipv6_src_addr_t
| | | | +--ro destination-address?    ipi-acl-types:acl_any_ipv6_dest_addr_t
| | | | +--ro dscp?                   ipi-acl-types:acl_dscp_t
| | | | +--ro inner-vlan-id?          uint16 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--ro flow-label?             uint32 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--ro (protocol)?
| | | | | +--:(tcp)
| | | | | | +--ro protocol-tcp?      empty
| | | | | | +--ro tcp-source-port?   ipi-acl-types:acl_tcp_src_port_t
| | | | | | +--ro tcp-destination-port? ipi-acl-types:acl_tcp_dest_port_t
| | | | | | +--ro tcp-flags?         ipi-acl-types:acl_tcp_flags_t {feature-list:HAVE_CUSTOM1_ACL}?
| | | | | | +--:(udp)
| | | | | | +--ro protocol-udp?      empty
| | | | | | +--ro udp-source-port?   ipi-acl-types:acl_udp_src_port_t
| | | | | | +--ro udp-destination-port? ipi-acl-types:acl_udp_dest_port_t
| | | | | | +--:(icmp)
| | | | | | +--ro protocol-icmp?     empty
| | | | | | +--ro icmp-message?      ipi-acl-types:acl_icmpv6_options_t {feature-
list:HAVE_CUSTOM1_ACL}?
| | | | | | +--ro icmp-type?         uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | | | +--ro icmp-code?         uint8 {feature-list:HAVE_CUSTOM1_ACL}?
| | | | | | +--:(sctp)
| | | | | | +--ro protocol-sctp?     empty
| | | | | | +--ro sctp-source-port?   uint16
| | | | | | +--ro sctp-destination-port? uint16
| | | | | | +--:(other-protocols)
| | | | | | +--ro protocol-name?     ipi-acl-types:acl_ipv6_protocols_t
| | | | | +--ro source-port-operator? ipi-acl-types:acl_src_port_operations_t
| | | | | +--ro lower-source-port-in-range? uint16
| | | | | +--ro upper-source-port-in-range? uint16
| | | | | +--ro destination-port-operator? ipi-acl-types:acl_dest_port_operations_t
| | | | | +--ro lower-destination-port-in-range? uint16
| | | | | +--ro upper-destination-port-in-range? uint16

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```

| | | | +--ro redirect-interface-name?      string {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--ro fragments?                    empty {feature-list:HAVE_CUSTOM1_ACL}?
| | | | +--rw fragment-actions {feature-list:HAVE_CUSTOM1_ACL}?
| | | |   +--rw config
| | | | | +--rw fragment-forwarding-action? ipi-acl-types:acl_fragment_forwarding_action_t {feature-
list:HAVE_CUSTOM1_ACL}?
| | | | | +--rw fragment-monitor-action?   ipi-acl-types:acl_monitor_action_t {feature-
list:HAVE_SFLOW,feature-list:HAVE_CUSTOM1_ACL}?
| | | |   +--ro state
| | | |   +--ro fragment-forwarding-action? ipi-acl-types:acl_fragment_forwarding_action_t {feature-
list:HAVE_CUSTOM1_ACL}?
| | | |   +--ro fragment-monitor-action?   ipi-acl-types:acl_monitor_action_t {feature-
list:HAVE_SFLOW,feature-list:HAVE_CUSTOM1_ACL}?
| | | +--rw arp
| | | | +--rw config
| | | | | +--rw forwarding-action?          ipi-acl-types:acl_forwarding_action_t
| | | | | +--rw vlan-id?                    uint16
| | | | | +--rw monitor-action?             ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | | | | +--rw inner-vlan-id?              uint16
| | | | | +--rw (source-mac-options)?
| | | | | | +--:(any-mac)
| | | | | | | +--rw source-mac-any?         empty
| | | | | | | +--:(host-mac)
| | | | | | | +--rw source-mac-host?        ipi-acl-types:acl_mac_addr_t
| | | | | | | +--:(mac-with-mask)
| | | | | | | +--rw source-mac-address?     ipi-acl-types:acl_mac_addr_t
| | | | | | | +--rw source-mac-mask?       ipi-acl-types:acl_mac_addr_t
| | | | | +--rw arp-packet-type?           ipi-acl-types:acl_arp_type_t
| | | | | +--rw source-ip-address?         ipi-acl-types:acl_any_ipv4_src_addr_t
| | | | | +--rw destination-ip-address?    ipi-acl-types:acl_any_ipv4_dest_addr_t
| | | | | +--rw (destination-mac-options)?
| | | | | | +--:(any-mac)
| | | | | | | +--rw destination-mac-any?    empty
| | | | | | | +--:(host-mac)
| | | | | | | +--rw destination-mac-host?   ipi-acl-types:acl_mac_addr_t
| | | | | | | +--:(mac-with-mask)
| | | | | +--rw destination-mac-address?   ipi-acl-types:acl_mac_addr_t

```

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```

| | | | +--rw destination-mac-mask?   ipi-acl-types:acl_mac_addr_t
| | | +--ro state
| | | +--ro counters
| | | | +--ro matched-packets?  yang:counter64
| | | +--ro forwarding-action?      ipi-acl-types:acl_forwarding_action_t
| | | +--ro vlan-id?                uint16
| | | +--ro monitor-action?          ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | | +--ro inner-vlan-id?           uint16
| | | +--ro (source-mac-options)?
| | | | +--:(any-mac)
| | | | | +--ro source-mac-any?      empty
| | | | | +--:(host-mac)
| | | | | +--ro source-mac-host?     ipi-acl-types:acl_mac_addr_t
| | | | | +--:(mac-with-mask)
| | | | | +--ro source-mac-address?  ipi-acl-types:acl_mac_addr_t
| | | | | +--ro source-mac-mask?    ipi-acl-types:acl_mac_addr_t
| | | | +--ro arp-packet-type?      ipi-acl-types:acl_arp_type_t
| | | | +--ro source-ip-address?     ipi-acl-types:acl_any_ipv4_src_addr_t
| | | | +--ro destination-ip-address? ipi-acl-types:acl_any_ipv4_dest_addr_t
| | | | +--ro (destination-mac-options)?
| | | | +--:(any-mac)
| | | | | +--ro destination-mac-any?  empty
| | | | | +--:(host-mac)
| | | | | +--ro destination-mac-host? ipi-acl-types:acl_mac_addr_t
| | | | | +--:(mac-with-mask)
| | | | | +--ro destination-mac-address? ipi-acl-types:acl_mac_addr_t
| | | | | +--ro destination-mac-mask? ipi-acl-types:acl_mac_addr_t
| | +--rw mac
| | +--rw config
| | | +--rw forwarding-action?      ipi-acl-types:acl_forwarding_action_t
| | | +--rw vlan-id?                uint16
| | | +--rw monitor-action?          ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | | +--rw inner-vlan-id?           uint16
| | | +--rw (source-mac-options)?
| | | | +--:(any-mac)

```

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---

```

| | | | +--rw source-mac-any?      empty
| | | | +--:(host-mac)
| | | | +--rw source-mac-host?      ipi-acl-types:acl_mac_addr_t
| | | | +--:(mac-with-mask)
| | | | +--rw source-mac-address?    ipi-acl-types:acl_mac_addr_t
| | | | +--rw source-mac-mask?      ipi-acl-types:acl_mac_addr_t
| | | | +--rw ethertype?            ipi-acl-types:acl_ether_type_t
| | | | +--rw arp-packet-type?      ipi-acl-types:acl_arp_packet_type_t
| | | | +--rw cos-value?            uint8
| | | | +--rw (destination-mac-options)?
| | | | +--:(any-mac)
| | | | +--rw destination-mac-any?   empty
| | | | +--:(host-mac)
| | | | +--rw destination-mac-host?  ipi-acl-types:acl_mac_addr_t
| | | | +--:(mac-with-mask)
| | | | +--rw destination-mac-address? ipi-acl-types:acl_mac_addr_t
| | | | +--rw destination-mac-mask?  ipi-acl-types:acl_mac_addr_t
| | +--ro state
| | +--ro counters
| | | +--ro matched-packets? yang:counter64
| | +--ro forwarding-action?        ipi-acl-types:acl_forwarding_action_t
| | +--ro vlan-id?                  uint16
| | +--ro monitor-action?           ipi-acl-types:acl_monitor_action_t {feature-list:HAVE_SFLOW,feature-
list:HAVE_CUSTOM1_ACL}?
| | +--ro inner-vlan-id?            uint16
| | +--ro (source-mac-options)?
| | | +--:(any-mac)
| | | | +--ro source-mac-any?      empty
| | | | +--:(host-mac)
| | | | +--ro source-mac-host?      ipi-acl-types:acl_mac_addr_t
| | | | +--:(mac-with-mask)
| | | | +--ro source-mac-address?    ipi-acl-types:acl_mac_addr_t
| | | | +--ro source-mac-mask?      ipi-acl-types:acl_mac_addr_t
| | | +--ro ethertype?            ipi-acl-types:acl_ether_type_t
| | | +--ro arp-packet-type?      ipi-acl-types:acl_arp_packet_type_t
| | | +--ro cos-value?            uint8
| | | +--ro (destination-mac-options)?

```

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---

```

| |      +--:(any-mac)
| |      | +--ro destination-mac-any?    empty
| |      +--:(host-mac)
| |      | +--ro destination-mac-host?    ipi-acl-types:acl_mac_addr_t
| |      +--:(mac-with-mask)
| |      +--ro destination-mac-address?    ipi-acl-types:acl_mac_addr_t
| |      +--ro destination-mac-mask?    ipi-acl-types:acl_mac_addr_t
| +--ro summary-info
|   +--ro state
|     +--ro counters
|       +--ro total-acl-entries?  yang:counter32
|       +--ro statistics-enabled? empty
|   +--ro interfaces
|     +--ro interface* [interface-name]
|       +--ro interface-name  -> ../state/interface-name
|       +--ro state
|         +--ro interface-name?  -> /ipi-interface:interfaces/interface/name
|         +--ro filter-direction? ipi-acl-types:acl_filter_direction_t
|         +--ro interface-type?   ipi-acl-types:acl_interface_type_t
|         +--ro interface-status? ipi-acl-types:acl_interface_status_t
|   +--ro vty-line
|     +--ro state
|       +--ro filter-direction? ipi-acl-types:acl_filter_direction_t
+--rw standard-acl-sets
| +--rw standard-acl-set* [name type]
|   +--rw name          -> ../config/name
|   +--rw type          -> ../config/type
|   +--rw config
|     +--rw name?  string
|     +--rw type? ipi-acl-types:acl_standard_types_t
|   +--ro state
|     +--rw name?  string
|     +--rw type? ipi-acl-types:acl_standard_types_t
|   +--rw ipv4-acl-entries
|     +--rw ipv4-acl-entry* [source-address]
|       +--rw source-address  -> ../config/source-address

```

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```

| | +--rw config
| | | +--rw source-address?   ipi-acl-types:acl_any_ipv4_src_addr_t
| | | +--rw forwarding-action ipi-acl-types:acl_forwarding_action_t
| | +--ro state
| |   +--ro source-address?   ipi-acl-types:acl_any_ipv4_src_addr_t
| |   +--ro forwarding-action ipi-acl-types:acl_forwarding_action_t
| +--rw ipv6-acl-entries {feature-list:HAVE_IPV6}?
|   +--rw ipv6-acl-entry* [source-address]
|     +--rw source-address  -> ../config/source-address
|     +--rw config
|       | +--rw source-address?   ipi-acl-types:acl_any_ipv6_src_addr_t
|       | +--rw forwarding-action ipi-acl-types:acl_forwarding_action_t
|       +--ro state
|         +--ro source-address?   ipi-acl-types:acl_any_ipv6_src_addr_t
|         +--ro forwarding-action ipi-acl-types:acl_forwarding_action_t
+--rw interfaces
| +--rw interface* [name]
|   +--rw name          -> ../config/name
|   +--rw config
|     | +--rw name? -> /ipi-interface:interfaces/interface/name
|     +--ro state
|     | +--ro name? -> /ipi-interface:interfaces/interface/name
|     +--rw ingress-acl-sets
|       | +--rw ingress-acl-set* [acl-type]
|       |   +--rw acl-type    -> ../config/acl-type
|       |   +--rw config
|       |     | +--rw acl-type? ipi-acl-types:acl_types_t
|       |     +--ro state
|       |     | +--ro acl-type? ipi-acl-types:acl_types_t
|       |     +--rw access-groups
|       |       +--rw access-group* [acl-name]
|       |         +--rw acl-name  -> ../config/acl-name
|       |         +--rw config
|       |           | +--rw acl-name?  string
|       |           | +--rw time-range? string
|       |           +--ro state

```

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```

| |      +--ro acl-name?  string
| |      +--ro time-range? string
| +--rw egress-acl-sets
|   +--rw egress-acl-set* [acl-type]
|     +--rw acl-type    -> ../config/acl-type
|     +--rw config
|       | +--rw acl-type? ipi-acl-types:acl_types_t
|       +--ro state
|       | +--ro acl-type? ipi-acl-types:acl_types_t
|       +--rw access-groups
|         +--rw access-group* [acl-name]
|           +--rw acl-name  -> ../config/acl-name
|           +--rw config
|             | +--rw acl-name?  string
|             | +--rw time-range? string
|             +--ro state
|               +--ro acl-name?  string
|               +--ro time-range? string
+--rw vty-line
  +--rw ingress-acl-sets
  | +--rw ingress-acl-set* [acl-type]
  | +--rw acl-type  -> ../config/acl-type
  | +--rw config
  | | +--rw acl-type? ipi-acl-types:acl_vty_types_t
  | | +--rw acl-name? string
  | +--ro state
  | +--ro acl-type? ipi-acl-types:acl_vty_types_t
  | +--ro acl-name? string
+--rw egress-acl-sets
  +--rw egress-acl-set* [acl-type]
  +--rw acl-type  -> ../config/acl-type
  +--rw config
  | +--rw acl-type? ipi-acl-types:acl_vty_types_t
  | +--rw acl-name? string
  +--ro state
    +--ro acl-type? ipi-acl-types:acl_vty_types_t

```

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---

```
+--ro acl-name? string
```

```
rpcs:
```

```
+---x clear-access-list-counters-all {feature-list:HAVE_ACL}?
+---x clear-access-list-counters {feature-list:HAVE_ACL}?
| +---w input
|   +---w name string
+---x clear-ip-access-list-counters-all {feature-list:HAVE_ACL}?
+---x clear-ip-access-list-counters {feature-list:HAVE_ACL}?
| +---w input
|   +---w name string
+---x clear-ipv6-access-list-counters-all {feature-list:HAVE_IPV6}?
+---x clear-ipv6-access-list-counters {feature-list:HAVE_IPV6}?
| +---w input
|   +---w name string
+---x clear-mac-access-list-counters-all {feature-list:HAVE_ACL}?
+---x clear-mac-access-list-counters {feature-list:HAVE_ACL}?
| +---w input
|   +---w name string
+---x clear-arp-access-list-counters-all {feature-list:HAVE_ACL}?
+---x clear-arp-access-list-counters {feature-list:HAVE_ACL}?
    +---w input
        +---w name string
```

---

## module: ipi-alarms

```
+--rw alarms
+--ro alarm* [id]
    +--ro id -> ../state/id
    +--ro state
        +--ro id? string
        +--ro resource? string
        +--ro text? string
        +--ro time-created? uint64
        +--ro alarm-reported-timestamp? ipi-alarms-types:alarm_date_time_t
```



```

+--ro alarm-severity?      ipi-alarms-types:alarm_severity_t
+--ro type-id?             ipi-alarms-types:alarm_type_id_t

```

augment /ipi-platform:components/ipi-platform:component/ipi-platform:state:

```

+--ro component-alarm {feature-list:HAVE_CMMD}?
  +--ro equipment-failure?  boolean

```

notifications:

```

+---n alarm
  +--ro severity?          cml-data-types:cml_notif_severity_t
  +--ro eventClass?        cml-data-types:cml_notif_class_t
  +--ro id?                string
  +--ro resource?          string
  +--ro text?              string
  +--ro time-created?       uint64
  +--ro alarm-reported-timestamp? ipi-alarms-types:alarm_date_time_t
  +--ro alarm-severity?     ipi-alarms-types:alarm_severity_t
  +--ro type-id?           ipi-alarms-types:alarm_type_id_t
  +--ro is-clear?          boolean

```

---

## module: ipi-arp

```

+--rw arp
  +--rw entries
    | +--rw entry* [vrf-name ip-address]
    |   +--rw vrf-name    -> ../config/vrf-name
    |   +--rw ip-address  -> ../config/ip-address
    |   +--rw config
    |     | +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    |     | +--rw ip-address?     inet:ipv4-address
    |     | +--rw mac-address     cml-data-types:cml_mac_addr_t
    |     | +--rw respond-to-arp-request? empty
    |     +--ro state

```

```

|   +--ro vrf-name?          -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
|   +--ro ip-address?        inet:ipv4-address
|   +--ro mac-address        cml-data-types:cml_mac_addr_t
|   +--ro respond-to-arp-request? empty
|   +--ro arp-age?           string
|   +--ro interface-name?    string
|   +--ro physical-interface-name? string
|   +--ro arp-state?         ipi-arp-types:ndd_arp_state_t
|   +--ro interface-state?   ipi-arp-types:ndd_arp_if_type_t
+--rw debug
| +--rw config
| | +--rw enable? empty
| +--ro state
|   +--ro enable?          empty
|   +--ro terminal-debug-status? cml-data-types:cml_on_off_t
+--rw interfaces
| +--rw interface* [name]
|   +--rw name    -> ../config/name
|   +--rw config
|   | +--rw name?          -> /ipi-interface:interfaces/interface/name
|   | +--rw enable-proxy-arp? empty
|   | +--rw enable-local-proxy-arp? empty
|   | +--rw enable-ip-redirects? empty
|   | +--rw arp-ageing-timeout? uint16
|   | +--rw arp-reachable-time? uint16
|   +--ro state
|     +--ro name?          -> /ipi-interface:interfaces/interface/name
|     +--ro enable-proxy-arp? empty
|     +--ro enable-local-proxy-arp? empty
|     +--ro enable-ip-redirects? empty
|     +--ro arp-ageing-timeout? uint16
|     +--ro arp-reachable-time? uint16
+--ro dynamic-arp* [vrf-name]
  +--ro vrf-name      string
  +--ro entry* [ipv4-address]
    | +--ro ipv4-address    inet:ipv4-address

```

```

| +--ro mac-address?          cml-data-types:cml_mac_addr_t
| +--ro arp-age?              string
| +--ro interface-name?       string
| +--ro physical-interface-name? string
| +--ro arp-state?            ipi-arp-types:ndd_arp_state_t
| +--ro interface-state?      ipi-arp-types:ndd_arp_if_type_t
+--ro adjacency-summary
  +--ro resolved-arp?         uint32
  +--ro incomplete-arp?       uint32
  +--ro unknown-arp?          uint32
  +--ro total-arp?            uint32

```

rpcs:

```

+---x arp-terminal-debug-on {feature-list:HAVE_L3,feature-list:HAVE_NDD}?
+---x arp-terminal-debug-off {feature-list:HAVE_L3,feature-list:HAVE_NDD}?
+---x clear-arp-entry {feature-list:HAVE_L3,feature-list:HAVE_NDD}?
| +---w input
|   +---w ip-address?  inet:ipv4-address
|   +---w vrf-name?    string
+---x clear-arp-entry-per-interface {feature-list:HAVE_L3,feature-list:HAVE_NDD}?
  +---w input
    +---w if-name      string
    +---w vrf-name?    string

```

---

## module: ipi-authentication-radius

```

+--rw authentication-radius {feature-list:HAVE_ENCRYPT_CLEARTEXT}?
  +--rw global
  | +--rw config
  | | +--rw source-address?      inet:ipv4-address
  | | +--rw port?                uint16
  | | +--rw timeout?             uint8
  | | +--rw retransmit-max-retries? uint8
  | | +--rw (key-type)?

```

---

```

| | +--:(key-string)
| | | +--rw key-string?      string
| | +--:(encrypted)
| |   +--rw encryption-key?  string
| +--ro state
|   +--ro source-address?    inet:ipv4-address
|   +--ro port?              uint16
|   +--ro timeout?           uint8
|   +--ro retransmit-max-retries? uint8
|   +--ro (key-type)?
|     +--:(key-string)
|     | +--ro key-string?    string
|     +--:(encrypted)
|       +--ro encryption-key? string
+--rw hosts
+--rw host* [host-address]
+--rw host-address -> ../config/host-address
+--rw config
| +--rw host-address?      inet:ipv4-address
| +--rw host-port?         uint16
| +--rw host-timeout?      uint8
| +--rw host-retransmit-max-retries? uint8
| +--rw (host-key-type)?
|   +--:(key-string)
|   | +--rw key-string?    string
|   +--:(encrypted)
|     +--rw encryption-key? string
+--ro state
+--ro host-address?        inet:ipv4-address
+--ro host-port?           uint16
+--ro host-timeout?        uint8
+--ro host-retransmit-max-retries? uint8
+--ro (host-key-type)?
| +--:(key-string)
| | +--ro key-string?      string
| +--:(encrypted)

```

---

```

|   +--ro encryption-key?          string
+--ro next-radius-message-id?      uint8
+--ro encryption-key-operational?   string
+--ro host-port-operational?        uint16
+--ro host-timeout-operational?     uint8
+--ro host-retransmit-max-retries-operational? uint8

```

---

## module: ipi-authentication

```

+--rw authentication {feature-list:HAVE_AUTHD}?
|   +--rw global
|   |   +--rw config
|   |   |   +--rw mac-authentication?    empty {feature-list:HAVE_MAC_AUTH}?
|   |   |   +--rw dot1x-authentication?   empty
|   |   |   +--ro state
|   |   |   |   +--ro mac-authentication?    empty {feature-list:HAVE_MAC_AUTH}?
|   |   |   |   +--ro dot1x-authentication?   empty
|   |   +--rw dot1x-interfaces
|   |   |   +--rw dot1x-interface* [name]
|   |   |   |   +--rw name                -> ../config/name
|   |   |   |   +--rw config
|   |   |   |   |   +--rw name?            -> /ipi-interface:interfaces/interface/name
|   |   |   |   |   +--rw dot1x-control    ipi-authentication-types:auth_dot1x_control_t
|   |   |   |   |   +--rw protocol-version? ipi-authentication-types:auth_dot1x_eapol_version_t
|   |   |   |   |   +--ro state
|   |   |   |   |   |   +--ro name?        -> /ipi-interface:interfaces/interface/name
|   |   |   |   |   |   +--ro dot1x-control    ipi-authentication-types:auth_dot1x_control_t
|   |   |   |   |   |   +--ro protocol-version? ipi-authentication-types:auth_dot1x_eapol_version_t
|   |   |   |   |   +--ro auth-dot1x-interface-operational
|   |   |   |   |   |   +--ro state
|   |   |   |   |   |   |   +--ro dot1x-control-operational? ipi-authentication-types:auth_dot1x_control_t
|   |   |   |   |   |   |   +--ro supplicant-name?          string
|   |   |   |   |   |   |   +--ro supplicant-mac-address?    ipi-authentication-types:auth_dot1x_mac_address_t
|   |   |   |   |   |   |   +--ro port-enabled?              boolean
|   |   |   |   |   |   |   +--ro authentication-abort?      boolean

```

---

```

| | +--ro authentication-fail?      boolean
| | +--ro authentication-start?    boolean
| | +--ro authentication-timeout?  boolean
| | +--ro authentication-success?  boolean
| | +--ro key-available?           boolean
| | +--ro key-tx-enabled?          boolean
| +--ro authentication-control-dir-operational
| | +--ro state
| | +--ro admin-controlled-directions? ipi-authentication-types:auth_dot1x_control_dir_t
| | +--ro oper-controlled-directions? ipi-authentication-types:auth_dot1x_control_dir_t
| | +--ro bridge-detected?        boolean
| +--ro authentication-key-received-operational
| | +--ro state
| | +--ro rx-key? boolean
| +--rw authenticator-pae
| | +--rw config
| | | +--rw quiet-period?  uint16
| | | +--rw max-reauth-value? uint8
| | | +--rw interval-period? uint16
| | +--ro state
| | +--ro quiet-period?  uint16
| | +--ro max-reauth-value? uint8
| | +--ro interval-period? uint16
| +--ro auth-authenticator-pae-operational
| | +--ro state
| | +--ro quiet-period-operational?  uint16
| | +--ro max-reauth-value-operational? uint8
| | +--ro interval-period-operational? uint16
| | +--ro port-status?               ipi-authentication-types:auth_dot1x_port_status_t
| | +--ro pae-state?                 ipi-authentication-types:auth_dot1x_pae_state_t
| | +--ro port-mode?                 ipi-authentication-types:auth_dot1x_port_ctrl_t
| | +--ro reauth-count?              uint32
| | +--ro rx-response-id?            uint32
| +--rw reauthentication-timer
| | +--rw config
| | | +--rw reauthentication-period? uint32

```

---

---

```

| | | +--rw enable-reauthentication? empty
| | | +--rw enable-mac-auth-bypass? ipi-authentication-types:auth_dot1x_mac_auth_bypass_t {feature-
list:HAVE_MAC_AUTH}?
| | +--ro state
| |   +--ro reauthentication-period? uint32
| |   +--ro enable-reauthentication? empty
| |   +--ro enable-mac-auth-bypass? ipi-authentication-types:auth_dot1x_mac_auth_bypass_t {feature-
list:HAVE_MAC_AUTH}?
|   +--ro reauthentication-timer-operational
|   +--ro state
|   +--ro reauthentication-period-operational? uint32
|   +--ro enable-reauthentication-operational? empty
|   +--ro dot1x-timer? ipi-authentication-types:auth_mac_dot1x_timer_status_t {feature-
list:HAVE_MAC_AUTH}?
|   +--ro mac-status? ipi-authentication-types:auth_mac_status_t {feature-
list:HAVE_MAC_AUTH}?
|   +--ro last-rejected-mac? ipi-authentication-types:auth_dot1x_mac_address_t {feature-
list:HAVE_MAC_AUTH}?
|   +--rw authenticator-be
|   +--rw config
|   | +--rw supplicant-timeout? uint16
|   | +--rw server-timeout? uint16
|   | +--ro state
|   |   +--ro supplicant-timeout? uint16
|   |   +--ro server-timeout? uint16
|   +--ro authenticator-be-operational
|   +--ro state
|   +--ro supplicant-timeout-operational? uint16
|   +--ro server-timeout-operational? uint16
|   +--ro current-id? uint8
|   +--ro be-state? ipi-authentication-types:auth_be_state_t
|   +--ro req-count? uint8
|   +--ro id-from-server? uint8
+--rw mac-interfaces {feature-list:HAVE_MAC_AUTH}?
| +--rw mac-interface* [name]
|   +--rw name -> ../config/name
|   +--rw config
|   | +--rw name? -> /ipi-interface:interfaces/interface/name

```

---

```

| | +--rw mac-control          empty
| | +--rw mac-mode?           ipi-authentication-types:auth_mac_mode_t
| | +--rw dynamic-vlan-creation? empty
| | +--rw mac-address-aging?   empty
| +--ro state
|   +--ro name?               -> /ipi-interface:interfaces/interface/name
|   +--ro mac-control          empty
|   +--ro mac-mode?           ipi-authentication-types:auth_mac_mode_t
|   +--ro dynamic-vlan-creation? empty
|   +--ro mac-address-aging?   empty
+--rw debug
  +--rw config
  | +--rw options? ipi-authentication-types:auth_dot1x_debug_t
  +--ro state
    +--ro options?          ipi-authentication-types:auth_dot1x_debug_t
    +--ro terminal-debug-status? ipi-authentication-types:auth_dot1x_debug_t

```

rpcs:

```

+---x dot1x-authentication-initialize-interface {feature-list:HAVE_MAC_AUTH}?
| +---w input
|   +---w name   string
+---x dot1x-authentication-snmp-restart {feature-list:HAVE_SNMP}?
+---x dot1x-authentication-terminal-debug-on {feature-list:HAVE_AUTHD}?
| +---w input
|   +---w terminal-debug-options ipi-authentication-types:auth_dot1x_debug_t
+---x dot1x-authentication-terminal-debug-off {feature-list:HAVE_AUTHD}?
  +---w input
    +---w terminal-debug-options ipi-authentication-types:auth_dot1x_debug_t

```

---

## module: ipi-bfd

```
+--rw bfd
```



```

+--rw global
| +--rw config
| | +--rw notification-enabled? boolean {feature-list:HAVE_BFD_MONO}?
| | +--rw echo-mode-enabled?    empty {feature-list:HAVE_BFD_MONO}?
| | +--rw slow-tx-interval?     uint32 {feature-list:HAVE_BFD_MONO}?
| +--ro state
| | +--ro notification-enabled?    boolean {feature-list:HAVE_BFD_MONO}?
| | +--ro echo-mode-enabled?       empty {feature-list:HAVE_BFD_MONO}?
| | +--ro slow-tx-interval?        uint32 {feature-list:HAVE_BFD_MONO}?
| | +--ro start-time?              yang:timeticks {feature-list:HAVE_BFD_MONO}?
| | +--ro administrative-state?    ipi-bfd-types:oambfd_admin_state_t {feature-list:HAVE_BFD_MONO}?
| | +--ro image-type?              ipi-bfd-types:oambfd_image_type_t {feature-list:HAVE_BFD_MONO}?
| | +--ro next-session-discriminator? string {feature-list:HAVE_BFD_MONO}?
| | +--ro counters
| |   +--ro total-sessions? yang:counter32
| +--rw intervals
|   +--rw interval* [desired-minimum-tx-interval required-minimum-rx-interval detection-multiplier] {feature-
list:HAVE_BFD_MONO}?
|     +--rw desired-minimum-tx-interval -> ../config/desired-minimum-tx-interval
|     +--rw required-minimum-rx-interval -> ../config/required-minimum-rx-interval
|     +--rw detection-multiplier        -> ../config/detection-multiplier
|     +--rw config
|       | +--rw desired-minimum-tx-interval? uint32
|       | +--rw required-minimum-rx-interval? uint32
|       | +--rw detection-multiplier?        uint8
|       +--ro state
|         +--ro desired-minimum-tx-interval? uint32
|         +--ro required-minimum-rx-interval? uint32
|         +--ro detection-multiplier?        uint8
+--rw peers
| +--rw peer* [remote-address]
|   +--rw remote-address -> ../config/remote-address
|   +--rw config
|     | +--rw remote-address? inet:ip-address
|     +--ro state
|       | +--ro remote-address? inet:ip-address
|       +--rw intervals

```

---

```

| | +--rw interval* [desired-minimum-tx-interval required-minimum-rx-interval detection-multiplier] {feature-
list:HAVE_BFD_MONO}?
| |   +--rw desired-minimum-tx-interval   -> ../config/desired-minimum-tx-interval
| |   +--rw required-minimum-rx-interval -> ../config/required-minimum-rx-interval
| |   +--rw detection-multiplier          -> ../config/detection-multiplier
| |   +--rw config
| |     +--rw desired-minimum-tx-interval? uint32
| |     +--rw required-minimum-rx-interval? uint32
| |     +--rw detection-multiplier?       uint8
| |   +--ro state
| |     +--ro desired-minimum-tx-interval? uint32
| |     +--ro required-minimum-rx-interval? uint32
| |     +--ro detection-multiplier?       uint8
| +--rw authentication
|   +--rw config
|     +--rw key-type?          ipi-bfd-types:bfd_multihop_auth_type_t
|     +--rw (key-option)?
|       +--:(key-id)
|         +--rw key-id?        uint32
|         +--rw key-encrypted? ipi-bfd-types:oambfd_encrypt_key_t
|         +--rw key-string?    string
|         +--:(key-chain)
|   +--ro state
|     +--ro key-type?          ipi-bfd-types:bfd_multihop_auth_type_t
|     +--ro (key-option)?
|       +--:(key-id)
|         +--ro key-id?        uint32
|         +--ro key-encrypted? ipi-bfd-types:oambfd_encrypt_key_t
|         +--ro key-string?    string
|         +--:(key-chain)
+--rw debug
| +--rw config
| | +--rw options? ipi-bfd-types:bfd_debug_t
| +--ro state
|   +--ro options?          ipi-bfd-types:bfd_debug_t
|   +--ro terminal-debug-status? ipi-bfd-types:bfd_debug_t
+--rw interfaces

```

---

```

| +--rw interface* [name]
|   +--rw name          -> ../config/name
|   +--rw config
|     | +--rw name?      -> /ipi-interface:interfaces/interface/name
|     | +--rw bfd-disabled?    empty
|     | +--rw bfd-session-type? ipi-bfd-types:oambfd_session_type_t {feature-list:HAVE_BFD_HW_OFFLOAD}?
|     +--ro state
|       | +--ro name?      -> /ipi-interface:interfaces/interface/name
|       | +--ro bfd-disabled?    empty
|       | +--ro bfd-session-type? ipi-bfd-types:oambfd_session_type_t {feature-list:HAVE_BFD_HW_OFFLOAD}?
|       | +--ro interface-index? uint32
|       | +--ro interface-state? ipi-bfd-types:oambfd_if_state_t
|       +--rw intervals
|         | +--rw interval* [desired-minimum-tx-interval required-minimum-rx-interval detection-multiplier] {feature-
list:HAVE_BFD_MONO}?
|         |   +--rw desired-minimum-tx-interval -> ../config/desired-minimum-tx-interval
|         |   +--rw required-minimum-rx-interval -> ../config/required-minimum-rx-interval
|         |   +--rw detection-multiplier      -> ../config/detection-multiplier
|         |   +--rw config
|         |     | +--rw desired-minimum-tx-interval? uint32
|         |     | +--rw required-minimum-rx-interval? uint32
|         |     | +--rw detection-multiplier?      uint8
|         |     +--ro state
|         |       +--ro desired-minimum-tx-interval? uint32
|         |       +--ro required-minimum-rx-interval? uint32
|         |       +--ro detection-multiplier?      uint8
|         +--rw echo
|         | +--rw config
|         |   | +--rw ipv4-source?          inet:ipv4-address
|         |   | +--rw required-minimum-tx-interval? uint32
|         |   +--ro state
|         |     +--ro ipv4-source?          inet:ipv4-address
|         |     +--ro required-minimum-tx-interval? uint32
|         +--rw authentication
|         | +--rw config
|         |   | +--rw key-type?          ipi-bfd-types:bfd_multihop_auth_type_t
|         |   | +--rw (key-option)?

```

---

```

| | | +--:(key-id)
| | | | +--rw key-id?      uint32
| | | | +--rw key-encrypted? ipi-bfd-types:oambfd_encrypt_key_t
| | | | +--rw key-string?   string
| | | +--:(key-chain)
| | +--ro state
| |   +--ro key-type?      ipi-bfd-types:bfd_multihop_auth_type_t
| |   +--ro (key-option)?
| |     +--:(key-id)
| |       | +--ro key-id?      uint32
| |       | +--ro key-encrypted? ipi-bfd-types:oambfd_encrypt_key_t
| |       | +--ro key-string?   string
| |       +--:(key-chain)
| +--rw sessions
|   +--rw session* [local-address remote-address session-type]
|     +--rw local-address  -> ../config/local-address
|     +--rw remote-address -> ../config/remote-address
|     +--rw session-type   -> ../config/session-type
|     +--rw config
|       | +--rw local-address?   inet:ip-address
|       | +--rw remote-address?  inet:ip-address
|       | +--rw session-type?    ipi-bfd-types:bfd_session_type_t
|       | +--rw administrative-down? empty
|       | +--rw non-persistent?   empty
|       +--ro state
|         +--ro local-address?   inet:ip-address
|         +--ro remote-address?  inet:ip-address
|         +--ro session-type?    ipi-bfd-types:bfd_session_type_t
|         +--ro administrative-down? empty
|         +--ro non-persistent?   empty
+--ro sessions
  +--ro session* [local-discriminator vrf-name]
    +--ro local-discriminator -> ../state/local-discriminator
    +--ro vrf-name            -> ../state/vrf-name
    +--ro state
    | +--ro counters

```

---

---

```
| | +--ro packets
| | | +--ro ipv4
| | | | +--ro received?      yang:counter64
| | | | +--ro transmitted?   yang:counter64
| | | | +--ro echo-transmitted? yang:counter64
| | | +--ro ipv6 {feature-list:HAVE_IPV6}?
| | | | +--ro received?      yang:counter64
| | | | +--ro transmitted?   yang:counter64
| | | | +--ro echo-transmitted? yang:counter64
| | +--ro up-transitions? yang:counter32
| +--ro lower-layer-type?      ipi-bfd-types:oambfd_sess_lower_layer_t
| +--ro uptime?               yang:timeticks
| +--ro version?              uint32
| +--ro local-port?           inet:port-number
| +--ro remote-port?          inet:port-number
| +--ro negotiated-detection-multiplier? uint8
| +--ro forward-hello-timer-hits? uint32
| +--ro remote-heard?         empty
| +--ro fate-shared?          empty
| +--ro remote-administrative-down? empty
| +--ro remote-demand-mode-enabled? empty
| +--ro remote-echo-enabled?   empty
| +--ro poll-bit?             empty
| +--ro storage-type?          ipi-bfd-types:bfd_storage_type_t
| +--ro downtime?             yang:timeticks
| +--ro discontinuity-time?     yang:timeticks
| +--ro authentication-key-id? uint32
| +--ro last-up-time?          yang:timeticks
| +--ro hold-down-timer?       uint32
| +--ro hold-down-timer-hits?  uint32
| +--ro session-type-status?    ipi-bfd-types:oambfd_session_type_status_t
| +--ro remote-address?        inet:ip-address
| +--ro local-address?         inet:ip-address
| +--ro vrf-name?              string
| +--ro interface-index?       uint32
| +--ro interface-name?        string
```

---

---

```

| +--ro remote-discriminator?      string
| +--ro local-discriminator?       string
| +--ro session-state?             ipi-bfd-types:oambfd_session_state_t
| +--ro session-type?              ipi-bfd-types:bfd_session_type_state_t
| +--ro session-diagnostics?        ipi-bfd-types:oambfd_perform_diag_t
| +--ro negotiated-tx-interval?     uint32
| +--ro negotiated-rx-interval?     uint32
+--ro micro-bfd-sessions {feature-list:HAVE_BFD_HW_OFFLOAD}?
| +--ro interface* [member-interface] {feature-list:HAVE_BFD_HW_OFFLOAD}?
|   +--ro member-interface -> ../state/member-interface
|   +--ro state
|     +--ro member-interface?       -> /ipi-interface:interfaces/interface/name
|     +--ro remote-session-state?    ipi-bfd-types:oambfd_session_state_t
|     +--ro remote-session-diagnostics? ipi-bfd-types:oambfd_perform_diag_t
|     +--ro interface-index?         uint32
|     +--ro interface-name?          string
|     +--ro remote-discriminator?    string
|     +--ro local-discriminator?     string
|     +--ro session-state?           ipi-bfd-types:oambfd_session_state_t
|     +--ro session-type?            ipi-bfd-types:bfd_session_type_state_t
|     +--ro session-diagnostics?     ipi-bfd-types:oambfd_perform_diag_t
|     +--ro negotiated-tx-interval?  uint32
|     +--ro negotiated-rx-interval?  uint32
+--ro echo
| +--ro state
|   +--ro local-echo-port?           inet:port-number
|   +--ro echo-desired-minimum-tx-interval? uint32
|   +--ro echo-required-minimum-rx-interval? uint32
|   +--ro negotiated-interval?       uint32
+--ro packet
+--ro clients
  +--ro client* [index]
    +--ro index -> ../state/index
    +--ro state
      +--ro index? uint32
      +--ro flags? ipi-bfd-types:oambfd_client_flags_t

```

rpcs:

```
+---x bfd-snmp-restart {feature-list:HAVE_SNMP}?
+---x bfd-terminal-debug-on {feature-list:HAVE_BFD}?
| +---w input
|   +---w terminal-debug-options   ipi-bfd-types:bfd_debug_t
+---x bfd-terminal-debug-off {feature-list:HAVE_BFD}?
    +---w input
        +---w terminal-debug-options   ipi-bfd-types:bfd_debug_t
```

notifications:

```
+---n bfd-session-state-change
+--ro severity?          cml-data-types:cml_notif_severity_t
+--ro eventClass?       cml-data-types:cml_notif_class_t
+--ro local-discriminator? string
+--ro vrf-name?         string
+--ro session-state?    ipi-bfd-types:oambfd_session_state_t
+--ro session-diagnostics? ipi-bfd-types:oambfd_perform_diag_t
```

---

## module: ipi-bgp-vrf

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-vrf:vrf:

```
+--rw bgp-vrf
+--rw config
| +--rw import-map? string
| +--rw export-map? string
| +--rw rd-string?  string
```

---

```

+--ro state
| +--ro counters
| | +--ro neighbor-rx-tx-stat
| | | +--ro messages-sent?      uint32
| | | +--ro messages-received?  uint32
| | | +--ro bytes-sent?         uint32
| | | +--ro bytes-received?     uint32
| | | +--ro opens-sent?        uint32
| | | +--ro opens-received?     uint32
| | | +--ro updates-sent?      uint32
| | | +--ro updates-received?   uint32
| | | +--ro keepalive-sent?    uint32
| | | +--ro keepalive-received? uint32
| | | +--ro notification-sent?  uint32
| | | +--ro notification-received? uint32
| | | +--ro route-refresh-sent? uint32
| | | +--ro route-refresh-received? uint32
| | | +--ro capabilities-sent?  uint32
| | | +--ro capabilities-received? uint32
| | +--ro local-input-output
| | | +--ro active-open?        uint16
| | | +--ro passive-open?       uint16
| | | +--ro open-loops?         uint16
| | | +--ro open-calls?         uint16
| | | +--ro open-received-calls? uint16
| | | +--ro send-calls?         uint16
| | | +--ro received-calls?     uint16
| | | +--ro write-calls?        uint16
| | | +--ro write-loops?        uint16
| | | +--ro write-loops-yield?  uint16
| | | +--ro read-calls?         uint16
| | | +--ro read-loops?         uint16
| | | +--ro read-loop-yield?    uint16
| | | +--ro process-nlri-yields? uint16
| | | +--ro process-withdraw-yields? uint16
| | | +--ro read-time-exceed?   uint16

```

---



---

```

| | | +--ro update-send-pending?      uint16
| | | +--ro update-buffer-not-available?  uint16
| | | +--ro update-walk-suspend?      uint16
| | | +--ro yield-in-update?          uint16
| | | +--ro yield-in-pack?            uint16
| | | +--ro no-send-buffer-peer?      uint16
| | | +--ro no-withdraw-buffer-peer?   uint16
| | | +--ro yields-in-update-peer-loop? uint16
| | | +--ro no-updates-pending-or-no-buffers? uint16
| | | +--ro no-data-to-write?         uint16
| | | +--ro message-queue-received-error? uint16
| | +--ro sockets
| |   +--ro created?      uint32
| |   +--ro accepted?     uint32
| |   +--ro closed?       uint32
| |   +--ro create-retries? uint32
| |   +--ro create-failures? uint32
| |   +--ro fd-close-session? uint32
| +--ro import-map?  string
| +--ro export-map?  string
| +--ro rd-string?   string
+--ro next-hop-tracking
| +--ro state
|   +--ro bgp-as?      uint32
|   +--ro router-id?   inet:ipv4-address
|   +--ro configured?   boolean
|   +--ro delay-time?   uint32
|   +--ro received-message-count? cml-data-types:cml_line_t
|   +--ro ipv4-count?   int32
|   +--ro ipv6-count?   int32
|   +--ro delay-time-remaining? int32
+--rw route-targets
| +--rw route-target* [rt-rd-string]
|   +--rw rt-rd-string -> ../config/rt-rd-string
|   +--rw config
|     | +--rw rt-rd-string? ipi-bgp-types:bgp_route_target_type_t

```

---

---

```

| | +--rw direction    ipi-bgp-types:bgp_target_route_type_t
|   +--ro state
|     +--ro rt-rd-string? ipi-bgp-types:bgp_route_target_type_t
|     +--ro direction    ipi-bgp-types:bgp_target_route_type_t
+--ro bgp-rd
  +--ro bgp-rd-as
    | +--ro state
    |   +--ro brd-as?      int32
    |   +--ro brd-as-number? int32
  +--ro bgp-rd-as4
    | +--ro state
    |   +--ro brd-as4?     int32
    |   +--ro brd-as-num4? int32
  +--ro bgp-rd-ip
    +--ro state
      +--ro brd-ip?        int32
      +--ro brd-ip-number? int32

```

---

## module: ipi-bgp

```

+--rw bgp
  +--rw global
    | +--rw config
    | | +--rw enable-aggregate-nexthop?    empty
    | | +--rw enable-path-select?          empty
    | | +--rw disable-adj-out?              empty
    | | +--rw disable-rfc7606-error-handling? empty
    | | +--rw enable-bogon-filtering?       empty
    | | +--rw enable-extended-asn-capability? empty {feature-list:HAVE_EXT_CAP_ASN}?
    | | +--rw enable-nexthop-tracking?      empty
    | | +--rw nexthop-tracking-delay?       uint8
    | | +--rw enable-rfc-1771-strict-origin? empty
    | +--ro state
    | | +--ro enable-aggregate-nexthop?    empty
    | | +--ro enable-path-select?          empty
    | | +--ro disable-adj-out?              empty

```

---

```

| | +--ro disable-rfc7606-error-handling? empty
| | +--ro enable-bogon-filtering? empty
| | +--ro enable-extended-asn-capability? empty {feature-list:HAVE_EXT_CAP_ASN}?
| | +--ro enable-nexthop-tracking? empty
| | +--ro nexthop-tracking-delay? uint8
| | +--ro enable-rfc-1771-strict-origin? empty
| +--rw community-lists
| | +--rw numbered-lists
| | | +--rw numbered-list* [standard-number]
| | |   +--rw standard-number -> ../config/standard-number
| | |   +--rw config
| | |     | +--rw standard-number? uint32
| | |     +--ro state
| | |     | +--ro standard-number? uint32
| | |     +--rw action-for-any
| | |     | +--rw config!
| | |     | | +--rw action-name ipi-bgp-types:bgp_community_list_action_t
| | |     | | +--ro state
| | |     |   +--ro action-name ipi-bgp-types:bgp_community_list_action_t
| | |     +--rw action-list-values
| | |       +--rw action-list-value* [action-standard-number standard-number-value]
| | |         +--rw action-standard-number -> ../config/action-standard-number
| | |         +--rw standard-number-value -> ../config/standard-number-value
| | |         +--rw config
| | |           | +--rw action-standard-number? ipi-bgp-types:bgp_community_list_action_t
| | |           | +--rw standard-number-value? string
| | |           +--ro state
| | |             +--ro action-standard-number? ipi-bgp-types:bgp_community_list_action_t
| | |             +--ro standard-number-value? string
| +--rw standards
| | +--rw standard* [list-type name]
| |   +--rw list-type -> ../config/list-type
| |   +--rw name -> ../config/name
| |   +--rw config
| |     | +--rw list-type? ipi-bgp-types:bgp_community_list_type_t
| |     | +--rw name? string

```

---

```
| | | +--ro state
| | | | +--ro list-type? ipi-bgp-types:bgp_community_list_type_t
| | | | +--ro name?      string
| | | +--rw action-for-any
| | | | +--rw config!
| | | | | +--rw action-name ipi-bgp-types:bgp_community_list_action_t
| | | | | +--ro state
| | | | | +--ro action-name ipi-bgp-types:bgp_community_list_action_t
| | | +--rw action-values
| | |   +--rw action-value* [action-name-standard community-value-standard]
| | |     +--rw action-name-standard -> ../config/action-name-standard
| | |     +--rw community-value-standard -> ../config/community-value-standard
| | |     +--rw config
| | |       | +--rw action-name-standard? ipi-bgp-types:bgp_community_list_action_t
| | |       | +--rw community-value-standard? string
| | |       +--ro state
| | |         +--ro action-name-standard? ipi-bgp-types:bgp_community_list_action_t
| | |         +--ro community-value-standard? string
| | +--rw expanded-lists
| | | +--rw expanded-list* [list-type expanded-type]
| | |   +--rw list-type -> ../config/list-type
| | |   +--rw expanded-type -> ../config/expanded-type
| | |   +--rw config
| | |     | +--rw list-type? ipi-bgp-types:bgp_expanded_list_t
| | |     | +--rw expanded-type? ipi-bgp-types:bgp_expanded_list_type_t
| | |     +--ro state
| | |       | +--ro list-type? ipi-bgp-types:bgp_expanded_list_t
| | |       | +--ro expanded-type? ipi-bgp-types:bgp_expanded_list_type_t
| | |     +--rw action-values
| | |       +--rw action-value* [action-expanded regular-expression-list]
| | |         +--rw action-expanded -> ../config/action-expanded
| | |         +--rw regular-expression-list -> ../config/regular-expression-list
| | |         +--rw config
| | |           | +--rw action-expanded? ipi-bgp-types:bgp_community_list_action_t
| | |           | +--rw regular-expression-list? cml-data-types:cml_line_t
| | |         +--ro state
```

```

| | |      +--ro action-expanded?      ipi-bgp-types:bgp_community_list_action_t
| | |      +--ro regular-expression-list?  cml-data-types:cml_line_t
| | +--rw extended-community
| |   +--rw numbered-lists
| |     +--rw numbered-list* [standard-number]
| |       +--rw standard-number  -> ../config/standard-number
| |       +--rw config
| |         | +--rw standard-number?  uint32
| |         +--ro state
| |           | +--ro standard-number?  uint32
| |           +--rw action-values
| |             +--rw action-value* [extended-action-number extended-value]
| |             +--rw extended-action-number  -> ../config/extended-action-number
| |             +--rw extended-value          -> ../config/extended-value
| |             +--rw config
| |               | +--rw extended-action-number?  ipi-bgp-types:bgp_community_list_action_t
| |               | +--rw extended-value?          cml-data-types:cml_line_t
| |               +--ro state
| |                 +--ro extended-action-number?  ipi-bgp-types:bgp_community_list_action_t
| |                 +--ro extended-value?          cml-data-types:cml_line_t
| | +--rw standards
| |   +--rw standard* [name]
| |     +--rw name      -> ../config/name
| |     +--rw config
| |       | +--rw name?  string
| |       +--ro state
| |         | +--ro name?  string
| |         +--rw action-values
| |           +--rw action-value* [extended-action route-target-soo value]
| |           +--rw extended-action  -> ../config/extended-action
| |           +--rw route-target-soo  -> ../config/route-target-soo
| |           +--rw value             -> ../config/value
| |           +--rw config
| |             | +--rw extended-action?  ipi-bgp-types:bgp_community_list_action_t
| |             | +--rw route-target-soo?  ipi-bgp-types:bgp_route_target_t
| |             | +--rw value?            string

```

```

| | |      +--ro state
| | |      +--ro extended-action?  ipi-bgp-types:bgp_community_list_action_t
| | |      +--ro route-target-soo?  ipi-bgp-types:bgp_route_target_t
| | |      +--ro value?             string
| | +--rw expanded-lists
| |   +--rw expanded-list* [list-type expanded-type]
| |   +--rw list-type      -> ../config/list-type
| |   +--rw expanded-type  -> ../config/expanded-type
| |   +--rw config
| |   | +--rw list-type?    ipi-bgp-types:bgp_expanded_list_t
| |   | +--rw expanded-type? ipi-bgp-types:bgp_expanded_list_type_t
| |   +--ro state
| |   | +--ro list-type?    ipi-bgp-types:bgp_expanded_list_t
| |   | +--ro expanded-type? ipi-bgp-types:bgp_expanded_list_type_t
| |   +--rw action-values
| |   +--rw action-value* [action value]
| |   +--rw action      -> ../config/action
| |   +--rw value       -> ../config/value
| |   +--rw config
| |   | +--rw action?      ipi-bgp-types:bgp_community_list_action_t
| |   | +--rw value?      cml-data-types:cml_line_t
| |   +--ro state
| |   +--ro action?      ipi-bgp-types:bgp_community_list_action_t
| |   +--ro value?      cml-data-types:cml_line_t
| +--rw as-path-access-lists
| | +--rw as-path-access-list* [access-list-name access-list-action access-list-regular-expression]
| | +--rw access-list-name      -> ../config/access-list-name
| | +--rw access-list-action     -> ../config/access-list-action
| | +--rw access-list-regular-expression -> ../config/access-list-regular-expression
| | +--rw config
| | | +--rw access-list-name?      string
| | | +--rw access-list-action?    ipi-bgp-types:bgp_community_list_action_t
| | | +--rw access-list-regular-expression? cml-data-types:cml_line_t
| | +--ro state
| | +--ro access-list-name?      string
| | +--ro access-list-action?    ipi-bgp-types:bgp_community_list_action_t

```

---

```

| |   +--ro access-list-regular-expression?  cml-data-types:cml_line_t
| +--rw mpls-l3vpn-label-modes
| +--rw debug
|   +--rw config
|     | +--rw options?  ipi-bgp-types:bgp_debug_t
|     +--ro state
|       +--ro terminal-debug-status
|         | +--ro terminal-debug-status?  ipi-bgp-types:bgp_debug_t
|         +--ro options?                  ipi-bgp-types:bgp_debug_t
+--rw bgp-instances
  +--rw bgp-instance* [bgp-as]
    +--rw bgp-as          -> ../config/bgp-as
    +--rw config
      | +--rw bgp-as?          uint32
      | +--rw router-id?       inet:ipv4-address
      | +--rw cluster-id?      ipi-bgp-types:bgp_cluster_id_t
      | +--rw local-preference? uint32
      | +--rw graceful-shutdown-capable? empty
      | +--rw graceful-shutdown? empty
      | +--rw graceful-shutdown-local-preference? uint32
      | +--rw inbound-route-filter-disable? empty {feature-list:HAVE_VRF}?
      | +--rw external-route-leak-disable? empty {feature-list:HAVE_VRF}?
      | +--rw log-neighbor-changes? empty
      | +--rw scan-interval?   uint32
      | +--rw best-path-dont-compare-originator? empty
      | +--rw no-best-path-tie-break? empty
      | +--rw enable-deterministic-med? empty
      | +--rw enforce-first-as-for-ebgp? empty
      | +--rw no-external-fail-over? empty
      | +--rw local-as-count?  uint8
      | +--rw no-client-route-reflection? empty
      | +--rw med-type?        ipi-bgp-types:bgp_med_type_t
      | +--rw multi-path-relax? empty
      | +--rw ignore-aigp-for-bestpath? empty {feature-list:HAVE_BGP_AIGP}?
    +--rw confederation
      | +--rw config

```

---

---

```

| | +--rw identifier?    uint32
| | +--rw peer-as-number* uint32
| +--ro state
|   +--ro identifier?    uint32
|   +--ro peer-as-number* uint32
+--rw view-lists
| +--rw view-list* [view-name]
|   +--rw view-name  -> ../config/view-name
|   +--rw config
|     | +--rw view-name? string
|     +--ro state
|       +--ro view-name? string
+--ro state
| +--ro version?          ipi-bgp-types:bgp_version_t
| +--ro table-version?    int32
| +--ro total-prefixes?   int32
| +--ro router-run-time-ip-address? inet:ipv4-address
| +--ro scan-remain-time? uint32
| +--ro bgp-as?           uint32
| +--ro router-id?        inet:ipv4-address
| +--ro cluster-id?       ipi-bgp-types:bgp_cluster_id_t
| +--ro local-preference? uint32
| +--ro graceful-shutdown-capable? empty
| +--ro graceful-shutdown? empty
| +--ro graceful-shutdown-local-preference? uint32
| +--ro inbound-route-filter-disable? empty {feature-list:HAVE_VRF}?
| +--ro external-route-leak-disable? empty {feature-list:HAVE_VRF}?
| +--ro log-neighbor-changes? empty
| +--ro scan-interval?    uint32
| +--ro best-path-dont-compare-originator? empty
| +--ro no-best-path-tie-break? empty
| +--ro enable-deterministic-med? empty
| +--ro enforce-first-as-for-ebgp? empty
| +--ro no-external-fail-over? empty
| +--ro local-as-count?   uint8
| +--ro no-client-route-reflection? empty

```

---



---

```

| +--ro med-type?          ipi-bgp-types:bgp_med_type_t
| +--ro multi-path-relax?   empty
| +--ro ignore-aigp-for-bestpath?  empty {feature-list:HAVE_BGP_AIGP}?
+--rw graceful-restart
| +--rw config
| | +--rw enable-graceful-restart?  empty {feature-list:HAVE_RESTART}?
| | +--rw restart-time?             uint32 {feature-list:HAVE_RESTART}?
| | +--rw stale-path-max-retention-time?  uint32 {feature-list:HAVE_RESTART}?
| | +--rw route-selection-max-defer-time? uint32 {feature-list:HAVE_RESTART}?
| | +--rw graceful-reset?            empty
| +--ro state
|   +--ro enable-graceful-restart?  empty {feature-list:HAVE_RESTART}?
|   +--ro restart-time?             uint32 {feature-list:HAVE_RESTART}?
|   +--ro stale-path-max-retention-time?  uint32 {feature-list:HAVE_RESTART}?
|   +--ro route-selection-max-defer-time? uint32 {feature-list:HAVE_RESTART}?
|   +--ro graceful-reset?            empty
+--rw timers
| +--rw config!
| | +--rw keep-alive  uint16
| | +--rw hold-time   uint16
| +--ro state
|   +--ro keep-alive  uint16
|   +--ro hold-time   uint16
+--rw route-selection
| +--rw config
| | +--rw always-compare-med?      empty
| | +--rw ignore-as-path-length?   empty
| | +--rw best-path-compare-confed? empty
| | +--rw external-compare-router-id? empty
| +--ro state
|   +--ro always-compare-med?      empty
|   +--ro ignore-as-path-length?   empty
|   +--ro best-path-compare-confed? empty
|   +--ro external-compare-router-id? empty
+--rw administrative-distances
| +--rw administrative-distance* [source-ip-prefix]

```

---

---

```

|   +--rw source-ip-prefix   -> ../config/source-ip-prefix
|   +--rw config
|   |   +--rw source-ip-prefix?  cml-data-types:cml_ipv4_prefix_t
|   |   +--rw distance          uint8
|   |   +--rw access-list-name? string
|   +--ro state
|   |   +--ro source-ip-prefix?  cml-data-types:cml_ipv4_prefix_t
|   |   +--ro distance          uint8
|   |   +--ro access-list-name? string
+--ro rib
| +--ro address-family* [afi safi]
|   +--ro afi          -> ../state/afi
|   +--ro safi         -> ../state/safi
|   +--ro state
|   |   +--ro afi?   ipi-bgp-types:bgp_afi_type_t
|   |   +--ro safi? ipi-bgp-types:bgp_safi_type_t
|   +--ro routes
|   |   +--ro route* [network-address route-distinguisher]
|   |   |   +--ro network-address   -> ../state/network-address
|   |   |   +--ro route-distinguisher -> ../state/route-distinguisher
|   |   |   +--ro next-hop* [next-hop-address]
|   |   |   |   +--ro next-hop-address -> ../state/next-hop-address
|   |   |   |   +--ro state
|   |   |   |   |   +--ro next-hop-address?      ipi-bgp-types:bgp_hostname_t
|   |   |   |   |   +--ro peer-network-weight?   uint32
|   |   |   |   |   +--ro flap-time-reuse-list?   string
|   |   |   |   |   +--ro flap-record-duration?   string
|   |   |   |   |   +--ro damp-time-to-reuse?     string
|   |   |   |   |   +--ro bgp-med-value?          uint32
|   |   |   |   |   +--ro bgp-as-path-string*     cml-data-types:cml_line_t
|   |   |   |   |   +--ro bgp-as-path-4-byte-string* string
|   |   |   |   |   +--ro bgp-as-path-4-byte-origin? ipi-bgp-types:bgp_origin_t
|   |   |   |   |   +--ro ibgp-metric-route?      int32
|   |   |   |   |   +--ro aggregate-as-route?     int32
|   |   |   |   |   +--ro aggregator-address-route? ipi-bgp-types:bgp_hostname_t
|   |   |   |   |   +--ro network-remote-address-route? ipi-bgp-types:bgp_hostname_t

```

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| | | +--ro originator-id-route?      ipi-bgp-types:bgp_hostname_t
| | | +--ro route-peer-address?       ipi-bgp-types:bgp_hostname_t
| | | +--ro route-local-preference?   uint32
| | | +--ro route-prefix-label?      uint32
| | | +--ro route-community-string?   string
| | | +--ro cluster-list-route*       ipi-bgp-types:bgp_hostname_t
| | | +--ro route-penalty?            int32
| | | +--ro route-flap-count?         int32
| | | +--ro last-update-route?        yang:date-and-time
| | | +--ro reflector-client-route?   boolean
| | | +--ro route-dampening-active?   boolean
| | | +--ro history-route?            boolean
| | | +--ro nexthop-valid-route?      boolean
| | | +--ro med-flag-type-route?      boolean
| | | +--ro valid-route?              boolean
| | | +--ro stale-route?              boolean
| | | +--ro route-type?               ipi-bgp-types:bgp_ri_type_t
| | | +--ro ecmp-multi-candidate-route? boolean
| | | +--ro multi-installed-route?    boolean
| | | +--ro route-synchronized-flag-route? boolean
| | | +--ro atomic-aggregate-route?   boolean
| | | +--ro selected-route?           boolean
| | | +--ro bgp-tx-path-id?           int16 {feature-list:HAVE_BGP_ADD_PATH}?
| | | +--ro bgp-rx-path-id?           int16 {feature-list:HAVE_BGP_ADD_PATH}?
| | | +--ro ipv4-multicast-capability? string
| | | +--ro vpnv4-unicast-capability? string
| | | +--ro rtfILTER-unicast-capability? string
| | | +--ro l2vpn-evpn-capability?    string
| | | +--ro ipv6-unicast-capability?  string
| | | +--ro ipv6-multicast-capability? string
| | | +--ro ipv6-label-unicast-capability? string
| | +--ro state
| |   +--ro network-address?    ipi-bgp-types:bgp_ip_network_t
| |   +--ro route-distinguisher? string
| +--ro evpn-routes
|   +--ro evpn-route* [route-distinguisher]

```

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```

|   +--ro route-distinguisher      -> ../state/route-distinguisher
|
|   +--ro state
|   |   +--ro route-distinguisher?  string
|   |   +--ro vrf-name?             string
|   +--ro mac-ip-route* [host-mac-address host-ip-address ethernet-tag-identifier next-hop-address]
|   |   +--ro host-mac-address      -> ../state/host-mac-address
|   |   +--ro host-ip-address       -> ../state/host-ip-address
|   |   +--ro ethernet-tag-identifier -> ../state/ethernet-tag-identifier
|   |   +--ro next-hop-address      -> ../state/next-hop-address
|   |   +--ro state
|   |   |   +--ro host-mac-address?    cml-data-types:cml_mac_addr_t
|   |   |   +--ro host-ip-address?    inet:ip-address
|   |   |   +--ro ethernet-tag-identifier? uint32
|   |   |   +--ro next-hop-address?    inet:ipv4-address
|   |   |   +--ro encapsulation-type?  string
|   |   |   +--ro ethernet-segment-identifier? string
|   |   |   +--ro l2-label?           uint32
|   |   |   +--ro l3-label?           uint32
|   +--ro inclusive-multicast-route* [ethernet-tag-identifier originating-router-ip-address]
|   |   +--ro ethernet-tag-identifier -> ../state/ethernet-tag-identifier
|   |   +--ro originating-router-ip-address -> ../state/originating-router-ip-address
|   |   +--ro state
|   |   |   +--ro ethernet-tag-identifier? uint32
|   |   |   +--ro originating-router-ip-address? inet:ipv4-address
|   |   |   +--ro next-hop-address?    inet:ipv4-address
|   |   |   +--ro encapsulation-type?  string
|   +--ro ethernet-segment-route* [ethernet-segment-identifier originating-router-ip-address]
|   |   +--ro ethernet-segment-identifier -> ../state/ethernet-segment-identifier
|   |   +--ro originating-router-ip-address -> ../state/originating-router-ip-address
|   |   +--ro state
|   |   |   +--ro ethernet-segment-identifier? string
|   |   |   +--ro originating-router-ip-address? inet:ipv4-address
|   |   |   +--ro next-hop-address?    inet:ipv4-address
|   |   |   +--ro encapsulation-type?  string
|   +--ro ethernet-auto-discovery-route* [ethernet-segment-identifier ethernet-tag-identifier next-hop-address]
|   |   +--ro ethernet-segment-identifier -> ../state/ethernet-segment-identifier

```

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```

| | | +--ro ethernet-tag-identifier -> ../state/ethernet-tag-identifier
| | | +--ro next-hop-address -> ../state/next-hop-address
| | | +--ro state
| | |   +--ro ethernet-segment-identifier? string
| | |   +--ro ethernet-tag-identifier? uint32
| | |   +--ro next-hop-address? inet:ipv4-address
| | |   +--ro encapsulation-type? string
| | |   +--ro label? uint32
| | +--ro ip-prefix-route* [ethernet-segment-identifier ethernet-tag-identifier originating-router-ip-address]
| |   +--ro ethernet-segment-identifier -> ../state/ethernet-segment-identifier
| |   +--ro ethernet-tag-identifier -> ../state/ethernet-tag-identifier
| |   +--ro originating-router-ip-address -> ../state/originating-router-ip-address
| |   +--ro state
| |     +--ro ethernet-segment-identifier? string
| |     +--ro ethernet-tag-identifier? uint32
| |     +--ro originating-router-ip-address? inet:ipv4-address
| |     +--ro next-hop-address? inet:ipv4-address
| |     +--ro encapsulation-type? string
| |     +--ro l3-label? uint32
+--rw address-families
| +--rw address-family* [afi safi]
|   +--rw afi -> ../config/afi
|   +--rw safi -> ../config/safi
|   +--rw config
| | +--rw enable-auto-summary? empty
| | +--rw enable-network-igp-sync? empty
| | +--rw enable-igp-sync? empty
| | +--rw enable-bgp-implicit-null? empty
| | +--rw afi? ipi-bgp-types:bgp_afi_type_t
| | +--rw safi? ipi-bgp-types:bgp_safi_type_t
| | +--rw additional-paths-mode? ipi-bgp-types:bgp_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| |   +--rw additional-path-select-all? empty {feature-list:HAVE_BGP_ADD_PATH}?
| |   +--rw additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
| |   +--rw no-client-route-reflection? empty
| | +--ro state
| |   +--ro enable-auto-summary? empty

```

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```

| | +--ro enable-network-igp-sync?      empty
| | +--ro enable-igp-sync?             empty
| | +--ro enable-bgp-implicit-null?    empty
| | +--ro afi?                         ipi-bgp-types:bgp_afi_type_t
| | +--ro safi?                        ipi-bgp-types:bgp_safi_type_t
| | +--ro additional-paths-mode?       ipi-bgp-types:bgp_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| | +--ro additional-path-select-all?  empty {feature-list:HAVE_BGP_ADD_PATH}?
| | +--ro additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
| | +--ro no-client-route-reflection?   empty
| +--rw network-lists
| | +--rw network-list* [local-network-prefix]
| |   +--rw local-network-prefix  -> ../config/local-network-prefix
| |   +--rw config
| |     | +--rw local-network-prefix? ipi-bgp-types:bgp_ip_network_t
| |     | +--rw network-rmap-name?   string
| |     | +--rw backdoor?            empty
| |     +--ro state
| |       +--ro network-path-route-count? int32
| |       +--ro no-advertise-route?      string
| |       +--ro no-export-route?         boolean
| |       +--ro local-as-route?          boolean
| |       +--ro suppress-route?          boolean
| |       +--ro network-best-path-route-count? int32
| |       +--ro ip-routing-table?        string
| |       +--ro advertised-non-peer-group-address* ipi-bgp-types:bgp_hostname_t
| |       +--ro advertised-peer-group-name-route* string
| |       +--ro advertised-any-peer?     boolean
| |       +--ro local-network-prefix?    ipi-bgp-types:bgp_ip_network_t
| |       +--ro network-rmap-name?       string
| |       +--ro backdoor?                empty
| +--rw aggregate-address-lists
| | +--rw aggregate-address-list* [aggregate-address]
| |   +--rw aggregate-address  -> ../config/aggregate-address
| |   +--rw config
| |     | +--rw aggregate-address? cml-data-types:cml_ip_prefix_t
| |     | +--rw aggregate-type?   ipi-bgp-types:bgp_aggregate_type_t

```

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```

| | +--ro state
| |   +--ro aggregate-address?  cml-data-types:cml_ip_prefix_t
| |   +--ro aggregate-type?     ipi-bgp-types:bgp_aggregate_type_t
| +--rw distances
| | +--rw distance* [ebgp ibgp local]
| |   +--rw ebgp    -> ../config/ebgp
| |   +--rw ibgp    -> ../config/ibgp
| |   +--rw local   -> ../config/local
| |   +--rw config
| |     | +--rw ebgp?  uint8
| |     | +--rw ibgp?  uint8
| |     | +--rw local? uint8
| |     +--ro state
| |       +--ro ebgp?  uint8
| |       +--ro ibgp?  uint8
| |       +--ro local? uint8
| +--rw maximum-paths
| | +--rw config
| |   | +--rw ebgp-max-path?  int32
| |   | +--rw ibgp-max-path?  int32
| |   | +--rw eibgp-max-path? int32
| |   +--ro state
| |     +--ro ebgp-max-path?  int32
| |     +--ro ibgp-max-path?  int32
| |     +--ro eibgp-max-path? int32
| +--rw table-map {feature-list:HAVE_BGP_TABLE_MAP}?
| | +--rw config!
| |   | +--rw map-name      string {feature-list:HAVE_BGP_TABLE_MAP}?
| |   | +--rw table-map-filter? boolean {feature-list:HAVE_BGP_TABLE_MAP}?
| |   +--ro state
| |     +--ro map-name      string {feature-list:HAVE_BGP_TABLE_MAP}?
| |     +--ro table-map-filter? boolean {feature-list:HAVE_BGP_TABLE_MAP}?
| +--rw route-flap-dampenings
| | +--rw route-flap-dampening* [enable-dampening]
| |   +--rw enable-dampening -> ../config/enable-dampening
| |   +--rw config

```

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```

| | | +--rw enable-dampening?    ipi-bgp-types:bgp_dampening_t
| | | +--rw reach-half-life?     uint32
| | | +--rw reuse-penalty?       uint32
| | | +--rw suppress-penalty?    uint32
| | | +--rw max-suppress-time?    uint32
| | | +--rw unreach-half-life?    uint32
| | | +--rw dampening-rmap-name?  string
| | +--ro state
| |   +--ro enable-dampening?     ipi-bgp-types:bgp_dampening_t
| |   +--ro reach-half-life?      uint32
| |   +--ro reuse-penalty?        uint32
| |   +--ro suppress-penalty?     uint32
| |   +--ro max-suppress-time?    uint32
| |   +--ro unreach-half-life?    uint32
| |   +--ro dampening-rmap-name?  string
| |   +--ro maximum-penalty-ceil? int32
| |   +--ro minimum-penalty-ceil? int32
| +--rw route-redistribute-lists
| | +--rw route-redistribute-list* [protocol-type]
| |   +--rw protocol-type -> ../config/protocol-type
| |   +--rw config
| |     | +--rw protocol-type?      ipi-bgp-types:bgp_redistribute_type_t
| |     | +--rw redist-route-map-name? string
| |     +--ro state
| |       +--ro protocol-type?      ipi-bgp-types:bgp_redistribute_type_t
| |       +--ro redist-route-map-name? string
| +--rw bgp-redistributes-ospf
|   +--rw bgp-redistribute-ospf* [ospf-instance-number]
|     +--rw ospf-instance-number -> ../config/ospf-instance-number
|     +--rw config
|       | +--rw ospf-instance-number?      ipi-bgp-types:cml_ospf_area_id_t
|       | +--rw redistribute-ospf-route-map? string
|       +--ro state
|         +--ro ospf-instance-number?      ipi-bgp-types:cml_ospf_area_id_t
|         +--ro redistribute-ospf-route-map? string
+--rw peer-groups

```

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---

```

| +--rw peer-group* [peer-group-tag]
|   +--rw peer-group-tag    -> ../config/peer-group-tag
|   +--rw config
|     +--rw peer-group-tag?      string
|     +--rw peer-group-range      ipi-bgp-types:bgp_peer_group_type_t
|     +--rw group-limit?         uint8
|     +--rw peer-as?             uint32
|     +--rw graceful-shut?       empty
|     +--rw enable-peer-bfd?     empty {feature-list:HAVE_BFD}?
|     +--rw enable-peer-bfd-multihop? empty {feature-list:HAVE_BFD}?
|     +--rw graceful-shutdown-timer? uint32
|     +--rw peer-restart-time?   uint32 {feature-list:HAVE_RESTART}?
|     +--rw peer-description?    cml-data-types:cml_line_t
|     +--rw peer-connect-interval? uint32
|     +--rw peer-as-origin-interval? uint32
|     +--rw min-route-advertisement-interval? uint32
|     +--rw enable-dynamic-capability? empty
|     +--rw collide-established? empty
|     +--rw source-identifier?   string
|     +--rw enforce-multi-hop?   empty
|     +--rw neighbor-override-capability? empty
|     +--rw neighbor-strict-capability-match? empty
|     +--rw disallow-infinite-hold-time? empty
|     +--rw disable-capability-negotiation? empty
|     +--rw neighbor-passive?    empty
|     +--rw peer-shutdown?       empty
|     +--rw peer-shutdown-description? cml-data-types:cml_line_t
|     +--rw peer-port?           uint16
|     +--rw bgp-version?         uint8
|     +--rw enable-ext-opt-param-len? empty
|     +--rw tcp-adjust-mss?      uint16
|   +--ro state
|     +--ro peer-group-tag?      string
|     +--ro peer-group-range      ipi-bgp-types:bgp_peer_group_type_t
|     +--ro group-limit?         uint8
|     +--ro peer-type?           ipi-bgp-types:bgp_peer_type_t

```

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```

| | +--ro peer-as?                uint32
| | +--ro graceful-shut?          empty
| | +--ro enable-peer-bfd?        empty {feature-list:HAVE_BFD}?
| | +--ro enable-peer-bfd-multihop?  empty {feature-list:HAVE_BFD}?
| | +--ro graceful-shutdown-timer?  uint32
| | +--ro peer-restart-time?        uint32 {feature-list:HAVE_RESTART}?
| | +--ro peer-description?        cml-data-types:cml_line_t
| | +--ro peer-connect-interval?    uint32
| | +--ro peer-as-origin-interval?  uint32
| | +--ro min-route-advertisement-interval? uint32
| | +--ro enable-dynamic-capability? empty
| | +--ro collide-established?      empty
| | +--ro source-identifier?        string
| | +--ro enforce-multi-hop?        empty
| | +--ro neighbor-override-capability? empty
| | +--ro neighbor-strict-capability-match? empty
| | +--ro disallow-infinite-hold-time? empty
| | +--ro disable-capability-negotiation? empty
| | +--ro neighbor-passive?         empty
| | +--ro peer-shutdown?            empty
| | +--ro peer-shutdown-description? cml-data-types:cml_line_t
| | +--ro peer-port?                uint16
| | +--ro bgp-version?              uint8
| | +--ro enable-ext-opt-param-len?  empty
| | +--ro tcp-adjust-mss?           uint16
| +--rw timers
| | +--rw config!
| | | +--rw keep-alive  uint16
| | | +--rw hold-time   uint16
| | +--ro state
| |   +--ro keep-alive  uint16
| |   +--ro hold-time   uint16
| +--rw ebgp-multihop
| | +--rw config!
| | | +--rw maximum-hop-count? uint8
| | | +--rw enabled            empty

```

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```

| | +--ro state
| |   +--ro maximum-hop-count? uint8
| |   +--ro enabled          empty
| +--rw bgp-passwords
| | +--rw bgp-password* [password]
| |   +--rw password  -> ../config/password
| |   +--rw config
| |     | +--rw password?      ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
| |     | +--rw auth-key-encrypt ipi-bgp-types:bgp_md5_t
| |     +--ro state
| |       +--ro password?      ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
| |       +--ro auth-key-encrypt ipi-bgp-types:bgp_md5_t
| +--rw optional-as-lists
| | +--rw optional-as-list* [optional-as]
| |   +--rw optional-as  -> ../config/optional-as
| |   +--rw config
| |     | +--rw optional-as? uint32
| |     +--ro state
| |       +--ro optional-as? uint32
| +--rw local-as
| | +--rw local-as-list* [peer-local-as]
| |   +--rw peer-local-as  -> ../config/peer-local-as
| |   +--rw config
| |     | +--rw peer-local-as? uint32
| |     | +--rw no-prepend-local-as? empty
| |     | +--rw replace-local-as? empty
| |     +--ro state
| |       +--ro peer-local-as? uint32
| |       +--ro no-prepend-local-as? empty
| |       +--ro replace-local-as? empty
| +--rw address-families
|   +--rw address-family* [afi safi]
|     +--rw afi          -> ../config/afi
|     +--rw safi          -> ../config/safi
|     +--rw config
|       | +--rw bgp-port?          uint16

```

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```

|   | +-rw activate?                empty
|   | +-rw default-peer-route-map-name?    empty
|   | +-rw peer-route-map-orig-name?       string
|   | +-rw weight?                       uint16
|   | +-rw peer-route-reflector?          empty
|   | +-rw peer-remove-private-as?        empty
|   | +-rw no-send-community?             empty
|   | +-rw no-send-community-type?        ipi-bgp-types:bgp_send_commu_type_t
|   | +-rw neighbor-attribute-unchanged?  ipi-bgp-types:bgp_attribute_unchanged_type_t
|   | +-rw orf-prefix-capability?         ipi-bgp-types:bgp_orf_prefix_type_t
|   | +-rw peer-allow-ebgp-vpn?           empty {feature-list:HAVE_VRF}?
|   | +-rw allow-as-number?               uint32
|   | +-rw capability-graceful-restart?    empty
|   | +-rw unsuppress-route-map-name?     string
|   | +-rw afi?                          ipi-bgp-types:bgp_afi_type_t
|   | +-rw safi?                         ipi-bgp-types:bgp_safi_type_t
|   | +-rw additional-paths-mode?         ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
|   | +-rw additional-path-select-all?    empty {feature-list:HAVE_BGP_ADD_PATH}?
|   | +-rw additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
|   | +-rw route-server-client?           empty
|   | +-rw next-hop-self?                 empty
|   +-ro state
|   | +-ro bgp-port?                     uint16
|   | +-ro activate?                     empty
|   | +-ro default-peer-route-map-name?    empty
|   | +-ro peer-route-map-orig-name?       string
|   | +-ro weight?                       uint16
|   | +-ro peer-route-reflector?          empty
|   | +-ro peer-remove-private-as?        empty
|   | +-ro no-send-community?             empty
|   | +-ro no-send-community-type?        ipi-bgp-types:bgp_send_commu_type_t
|   | +-ro neighbor-attribute-unchanged?  ipi-bgp-types:bgp_attribute_unchanged_type_t
|   | +-ro orf-prefix-capability?         ipi-bgp-types:bgp_orf_prefix_type_t
|   | +-ro peer-allow-ebgp-vpn?           empty {feature-list:HAVE_VRF}?
|   | +-ro allow-as-number?               uint32
|   | +-ro capability-graceful-restart?    empty

```

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```

|      | +--ro unsuppress-route-map-name?      string
|      | +--ro afi?                             ipi-bgp-types:bgp_afi_type_t
|      | +--ro safi?                             ipi-bgp-types:bgp_safi_type_t
|      | +--ro additional-paths-mode?           ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
|      | +--ro additional-path-select-all?      empty {feature-list:HAVE_BGP_ADD_PATH}?
|      | +--ro additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
|      | +--ro route-server-client?             empty
|      | +--ro next-hop-self?                   empty
|      +--rw maximum-prefixes
|      | +--rw maximum-prefix* [prefix-count]
|      |   +--rw prefix-count  -> ../config/prefix-count
|      |   +--rw config
|      |     | +--rw prefix-count?      uint32
|      |     | +--rw stop-update?       empty
|      |     | +--rw maximum-prefix-warning? empty
|      |     | +--rw threshold-percentage? uint8
|      |     | +--rw warning-only?      empty
|      |     +--ro state
|      |       +--ro prefix-count?      uint32
|      |       +--ro stop-update?       empty
|      |       +--ro maximum-prefix-warning? empty
|      |       +--ro threshold-percentage? uint8
|      |       +--ro warning-only?      empty
|      +--rw distribute-list-filters
|      | +--rw distribute-list-filter* [filter-direction]
|      |   +--rw filter-direction  -> ../config/filter-direction
|      |   +--rw config
|      |     | +--rw access-list-identifier  string
|      |     | +--rw filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|      |     +--ro state
|      |       +--ro access-list-identifier  string
|      |       +--ro filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|      +--rw as-list-filters
|      | +--rw as-list-filter* [as-list-direction]
|      |   +--rw as-list-direction  -> ../config/as-list-direction
|      |   +--rw config

```

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```

|   | | +--rw as-access-list-identifier  string
|   | | +--rw as-list-direction?        ipi-bgp-types:bgp_distribute_list_direction_t
|   | | +--ro state
|   | |   +--ro as-access-list-identifier  string
|   | |   +--ro as-list-direction?        ipi-bgp-types:bgp_distribute_list_direction_t
|   +--rw prefix-list-filters
|   | +--rw prefix-list-filter* [prefix-filter-direction]
|   |   +--rw prefix-filter-direction  -> ../config/prefix-filter-direction
|   |   +--rw config
|   |   | +--rw prefix-list-name        string
|   |   | +--rw prefix-filter-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   |   | +--ro state
|   |   |   +--ro prefix-list-name        string
|   |   |   +--ro prefix-filter-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   +--rw route-map-filters
|   | +--rw route-map-filter* [route-map-direction]
|   |   +--rw route-map-direction  -> ../config/route-map-direction
|   |   +--rw config
|   |   | +--rw route-map-name        string
|   |   | +--rw route-map-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   |   | +--ro state
|   |   |   +--ro route-map-name        string
|   |   |   +--ro route-map-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   +--rw aigp {feature-list:HAVE_BGP_AIGP}?
|   | +--rw config
|   |   +--rw admin-status?  cml-data-types:cml_enable_disable_t {feature-list:HAVE_BGP_AIGP}?
|   |   +--rw aigp-send-med? empty
|   |   +--ro state
|   |   | +--ro admin-status?  cml-data-types:cml_enable_disable_t {feature-list:HAVE_BGP_AIGP}?
|   |   | +--ro aigp-send-med? empty
|   |   +--rw cost-community {feature-list:HAVE_BGP_AIGP}?
|   |   | +--rw config!
|   |   |   +--rw send-cost-community-id  uint8 {feature-list:HAVE_BGP_AIGP}?
|   |   |   +--rw point-of-insertion      ipi-bgp-types:bgp_aigp_metric_cost_community_poi_t {feature-
list:HAVE_BGP_AIGP}?
|   |   |   +--rw enable-transitive?      empty {feature-list:HAVE_BGP_AIGP}?
|   |   |   +--ro state

```

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|           +--ro send-cost-community-id  uint8 {feature-list:HAVE_BGP_AIGP}?
|           +--ro point-of-insertion      ipi-bgp-types:bgp_aigp_metric_cost_community_poi_t {feature-
list:HAVE_BGP_AIGP}?
|           +--ro enable-transitive?      empty {feature-list:HAVE_BGP_AIGP}?
+--rw peers
| +--rw peer* [peer-address]
|   +--rw peer-address    -> ../config/peer-address
|   +--rw config
|     | +--rw peer-address?          ipi-bgp-types:bgp_ip_addr_t
|     | +--rw peer-as?              ipi-bgp-types:bgp_as_type_t
|     | +--rw graceful-shut?        empty
|     | +--rw enable-peer-bfd?      empty {feature-list:HAVE_BFD}?
|     | +--rw enable-peer-bfd-multihop?  empty {feature-list:HAVE_BFD}?
|     | +--rw graceful-shutdown-timer?  uint32
|     | +--rw peer-restart-time?      uint32 {feature-list:HAVE_RESTART}?
|     | +--rw peer-description?      cml-data-types:cml_line_t
|     | +--rw peer-connect-interval?   uint32
|     | +--rw peer-as-origin-interval? uint32
|     | +--rw min-route-advertisement-interval? uint32
|     | +--rw enable-dynamic-capability? empty
|     | +--rw collide-established?     empty
|     | +--rw source-identifier?       string
|     | +--rw enforce-multi-hop?       empty
|     | +--rw neighbor-override-capability? empty
|     | +--rw neighbor-strict-capability-match? empty
|     | +--rw disallow-infinite-hold-time? empty
|     | +--rw disable-capability-negotiation? empty
|     | +--rw neighbor-passive?        empty
|     | +--rw peer-shutdown?          empty
|     | +--rw peer-shutdown-description? cml-data-types:cml_line_t
|     | +--rw peer-port?              uint16
|     | +--rw bgp-version?            uint8
|     | +--rw interface-name?         string
|     | +--rw mapped-peer-group-tag?   string
|     | +--rw enable-ext-opt-param-len? empty
|     | +--rw tcp-adjust-mss?         uint16
|   +--ro state

```

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```
| | +--ro counters
| | | +--ro notification-in?   int32
| | | +--ro notification-out?  int32
| | | +--ro update-message-in? int32
| | | +--ro update-message-out? int32
| | +--ro peer-address?        ipi-bgp-types:bgp_ip_addr_t
| | +--ro peer-as?             ipi-bgp-types:bgp_as_type_t
| | +--ro graceful-shut?       empty
| | +--ro enable-peer-bfd?     empty {feature-list:HAVE_BFD}?
| | +--ro enable-peer-bfd-multihop? empty {feature-list:HAVE_BFD}?
| | +--ro graceful-shutdown-timer? uint32
| | +--ro peer-restart-time?    uint32 {feature-list:HAVE_RESTART}?
| | +--ro peer-description?    cml-data-types:cml_line_t
| | +--ro peer-connect-interval? uint32
| | +--ro peer-as-origin-interval? uint32
| | +--ro min-route-advertisement-interval? uint32
| | +--ro enable-dynamic-capability? empty
| | +--ro collide-established? empty
| | +--ro source-identifier?   string
| | +--ro enforce-multi-hop?   empty
| | +--ro neighbor-override-capability? empty
| | +--ro neighbor-strict-capability-match? empty
| | +--ro disallow-infinite-hold-time? empty
| | +--ro disable-capability-negotiation? empty
| | +--ro neighbor-passive?    empty
| | +--ro peer-shutdown?       empty
| | +--ro peer-shutdown-description? cml-data-types:cml_line_t
| | +--ro peer-port?           uint16
| | +--ro bgp-version?         uint8
| | +--ro interface-name?      string
| | +--ro mapped-peer-group-tag? string
| | +--ro enable-ext-opt-param-len? empty
| | +--ro tcp-adjust-mss?      uint16
| | +--ro peer-type?           ipi-bgp-types:bgp_peer_type_t
| | +--ro dynamically-configured? boolean
| | +--ro connection-established-count? int32
```



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```

| | +--ro error-notify-sent?          boolean
| | +--ro notify-code-string?        cml-data-types:cml_line_t
| | +--ro bgp-peer-state?            ipi-bgp-types:bgp_peer_status_t
| +--rw timers
| | +--rw config!
| | | +--rw keep-alive   uint16
| | | +--rw hold-time    uint16
| | +--ro state
| |   +--ro keep-alive   uint16
| |   +--ro hold-time    uint16
| +--rw ebgp-multihop
| | +--rw config!
| | | +--rw maximum-hop-count? uint8
| | | +--rw enabled           empty
| | +--ro state
| |   +--ro maximum-hop-count? uint8
| |   +--ro enabled           empty
| +--rw local-as
| | +--rw local-as-list* [peer-local-as]
| |   +--rw peer-local-as  -> ../config/peer-local-as
| |   +--rw config
| |     | +--rw peer-local-as?    uint32
| |     | +--rw no-prepend-local-as? empty
| |     | +--rw replace-local-as? empty
| |     +--ro state
| |       +--ro peer-local-as?    uint32
| |       +--ro no-prepend-local-as? empty
| |       +--ro replace-local-as? empty
| +--rw bgp-passwords
| | +--rw bgp-password* [password]
| |   +--rw password  -> ../config/password
| |   +--rw config
| |     | +--rw password?        ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
| |     | +--rw auth-key-encrypt ipi-bgp-types:bgp_md5_t
| |     +--ro state
| |       +--ro password?        ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?

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| |   +--ro auth-key-encrypt   ipi-bgp-types:bgp_md5_t
|   +--rw address-families
|     +--rw address-family* [afi safi]
|       +--rw afi              -> ../config/afi
|       +--rw safi              -> ../config/safi
|       +--ro peer-adj-out-route* [network-address]
|         | +--ro network-address  -> ../state/network-address
|         | +--ro next-hop* [next-hop-address]
|         | | +--ro next-hop-address  -> ../state/next-hop-address
|         | | +--ro state
|         | |   +--ro next-hop-address?      ipi-bgp-types:bgp_hostname_t
|         | |   +--ro peer-network-weight?   uint32
|         | |   +--ro flap-time-reuse-list?  string
|         | |   +--ro flap-record-duration?  string
|         | |   +--ro damp-time-to-reuse?    string
|         | |   +--ro bgp-med-value?         uint32
|         | |   +--ro bgp-as-path-string*    cml-data-types:cml_line_t
|         | |   +--ro bgp-as-path-4-byte-string*  string
|         | |   +--ro bgp-as-path-4-byte-origin? ipi-bgp-types:bgp_origin_t
|         | |   +--ro ibgp-metric-route?     int32
|         | |   +--ro aggregate-as-route?    int32
|         | |   +--ro aggregator-address-route? ipi-bgp-types:bgp_hostname_t
|         | |   +--ro network-remote-address-route? ipi-bgp-types:bgp_hostname_t
|         | |   +--ro originator-id-route?   ipi-bgp-types:bgp_hostname_t
|         | |   +--ro route-peer-address?    ipi-bgp-types:bgp_hostname_t
|         | |   +--ro route-local-preference? uint32
|         | |   +--ro route-prefix-label?    uint32
|         | |   +--ro route-community-string? string
|         | |   +--ro cluster-list-route*    ipi-bgp-types:bgp_hostname_t
|         | |   +--ro route-penalty?        int32
|         | |   +--ro route-flap-count?     int32
|         | |   +--ro last-update-route?     yang:date-and-time
|         | |   +--ro reflector-client-route? boolean
|         | |   +--ro route-dampening-active? boolean
|         | |   +--ro history-route?        boolean
|         | |   +--ro nexthop-valid-route?   boolean

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|   | | +--ro med-flag-type-route?      boolean
|   | | +--ro valid-route?              boolean
|   | | +--ro stale-route?              boolean
|   | | +--ro route-type?                ipi-bgp-types:bgp_ri_type_t
|   | | +--ro ecmp-multi-candidate-route? boolean
|   | | +--ro multi-installed-route?     boolean
|   | | +--ro route-synchronized-flag-route? boolean
|   | | +--ro atomic-aggregate-route?    boolean
|   | | +--ro selected-route?            boolean
|   | | +--ro bgp-tx-path-id?            int16 {feature-list:HAVE_BGP_ADD_PATH}?
|   | | +--ro bgp-rx-path-id?            int16 {feature-list:HAVE_BGP_ADD_PATH}?
|   | | +--ro ipv4-multicast-capability?  string
|   | | +--ro vpv4-unicast-capability?    string
|   | | +--ro rtfiler-unicast-capability? string
|   | | +--ro l2vpn-evpn-capability?      string
|   | | +--ro ipv6-unicast-capability?    string
|   | | +--ro ipv6-multicast-capability?  string
|   | | +--ro ipv6-label-unicast-capability? string
|   | +--ro state
|   | +--ro network-address? ipi-bgp-types:bgp_ip_network_t
| +--ro peer-adj-in-route* [network-address]
|   | +--ro network-address -> ../state/network-address
|   | +--ro next-hop* [next-hop-address]
|   | | +--ro next-hop-address -> ../state/next-hop-address
|   | | +--ro state
|   | | +--ro next-hop-address?          ipi-bgp-types:bgp_hostname_t
|   | | +--ro peer-network-weight?       uint32
|   | | +--ro flap-time-reuse-list?      string
|   | | +--ro flap-record-duration?      string
|   | | +--ro damp-time-to-reuse?        string
|   | | +--ro bgp-med-value?             uint32
|   | | +--ro bgp-as-path-string*        cml-data-types:cml_line_t
|   | | +--ro bgp-as-path-4-byte-string* string
|   | | +--ro bgp-as-path-4-byte-origin? ipi-bgp-types:bgp_origin_t
|   | | +--ro ibgp-metric-route?         int32
|   | | +--ro aggregate-as-route?        int32

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|   | | +--ro aggregator-address-route?   ipi-bgp-types:bgp_hostname_t
|   | | +--ro network-remote-address-route? ipi-bgp-types:bgp_hostname_t
|   | | +--ro originator-id-route?        ipi-bgp-types:bgp_hostname_t
|   | | +--ro route-peer-address?         ipi-bgp-types:bgp_hostname_t
|   | | +--ro route-local-preference?     uint32
|   | | +--ro route-prefix-label?         uint32
|   | | +--ro route-community-string?     string
|   | | +--ro cluster-list-route*         ipi-bgp-types:bgp_hostname_t
|   | | +--ro route-penalty?              int32
|   | | +--ro route-flap-count?           int32
|   | | +--ro last-update-route?          yang:date-and-time
|   | | +--ro reflector-client-route?     boolean
|   | | +--ro route-dampening-active?     boolean
|   | | +--ro history-route?              boolean
|   | | +--ro nexthop-valid-route?        boolean
|   | | +--ro med-flag-type-route?        boolean
|   | | +--ro valid-route?                boolean
|   | | +--ro stale-route?                boolean
|   | | +--ro route-type?                 ipi-bgp-types:bgp_ri_type_t
|   | | +--ro ecmp-multi-candidate-route? boolean
|   | | +--ro multi-installed-route?      boolean
|   | | +--ro route-synchronized-flag-route? boolean
|   | | +--ro atomic-aggregate-route?     boolean
|   | | +--ro selected-route?             boolean
|   | | +--ro bgp-tx-path-id?             int16 {feature-list:HAVE_BGP_ADD_PATH}?
|   | | +--ro bgp-rx-path-id?            int16 {feature-list:HAVE_BGP_ADD_PATH}?
|   | | +--ro ipv4-multicast-capability?  string
|   | | +--ro vpv4-unicast-capability?    string
|   | | +--ro rtfiler-unicast-capability? string
|   | | +--ro l2vpn-evpn-capability?      string
|   | | +--ro ipv6-unicast-capability?    string
|   | | +--ro ipv6-multicast-capability?  string
|   | | +--ro ipv6-label-unicast-capability? string
|   | +--ro state
|   | +--ro network-address? ipi-bgp-types:bgp_ip_network_t
|   +--rw config

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|      | +--rw afi?                  ipi-bgp-types:bgp_afi_type_t
|      | +--rw safi?                 ipi-bgp-types:bgp_safi_type_t
|      | +--rw additional-paths-mode? ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
|      | +--rw additional-path-select-all? empty {feature-list:HAVE_BGP_ADD_PATH}?
|      | +--rw additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
|      | +--rw route-server-client?    empty
|      | +--rw next-hop-self?          empty
|      | +--rw bgp-port?               uint16
|      | +--rw activate?               empty
|      | +--rw de-activate?            empty
|      | +--rw default-peer-route-map-name? empty
|      | +--rw peer-route-map-orig-name? string
|      | +--rw soft-reconfig?          ipi-bgp-types:bgp_update_clear_t
|      | +--rw weight?                uint16
|      | +--rw peer-route-reflector?    empty
|      | +--rw peer-remove-private-as? empty
|      | +--rw no-send-community?       empty
|      | +--rw no-send-community-type? ipi-bgp-types:bgp_send_commu_type_t
|      | +--rw neighbor-attribute-unchanged? ipi-bgp-types:bgp_attribute_unchanged_type_t
|      | +--rw orf-prefix-capability?   ipi-bgp-types:bgp_orf_prefix_type_t
|      | +--rw peer-allow-ebgp-vpn?     empty {feature-list:HAVE_VRF}?
|      | +--rw allow-as-number?         uint32
|      | +--rw capability-graceful-restart? empty
|      | +--rw extended-nexthop-encode? empty
|      | +--rw mapped-peer-group-tag-af? string
|      | +--rw unsuppress-route-map-name? string
|      +--ro state
|      | +--ro counters
|      | | +--ro keepalive-in-messages? int32
|      | | +--ro keepalive-out-messages? int32
|      | | +--ro open-messages-in?      int32
|      | | +--ro open-messages-out?     int32
|      | | +--ro as-path-count?         int32
|      | | +--ro as-path-extended-count? int32
|      | | +--ro received-packet-count? int32
|      | | +--ro packet-in-queue?       int32

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|      | | +--ro packet-out-queue?          int32
|      | | +--ro sent-packet-count?         int32
|      | | +--ro refresh-received-packet-count? int32
|      | | +--ro refresh-sent-packet-count?   int32
|      | | +--ro afi?                        ipi-bgp-types:bgp_afi_type_t
|      | | +--ro safi?                       ipi-bgp-types:bgp_safi_type_t
|      | | +--ro additional-paths-mode?      ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
|      | | +--ro additional-path-select-all? empty {feature-list:HAVE_BGP_ADD_PATH}?
|      | | +--ro additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
|      | | +--ro route-server-client?        empty
|      | | +--ro next-hop-self?               empty
|      | | +--ro bgp-port?                    uint16
|      | | +--ro activate?                    empty
|      | | +--ro de-activate?                 empty
|      | | +--ro default-peer-route-map-name? empty
|      | | +--ro peer-route-map-orig-name?    string
|      | | +--ro soft-reconfig?               ipi-bgp-types:bgp_update_clear_t
|      | | +--ro weight?                      uint16
|      | | +--ro peer-route-reflector?        empty
|      | | +--ro peer-remove-private-as?      empty
|      | | +--ro no-send-community?           empty
|      | | +--ro no-send-community-type?      ipi-bgp-types:bgp_send_commu_type_t
|      | | +--ro neighbor-attribute-unchanged? ipi-bgp-types:bgp_attribute_unchanged_type_t
|      | | +--ro orf-prefix-capability?       ipi-bgp-types:bgp_orf_prefix_type_t
|      | | +--ro peer-allow-ebgp-vpn?        empty {feature-list:HAVE_VRF}?
|      | | +--ro allow-as-number?             uint32
|      | | +--ro capability-graceful-restart? empty
|      | | +--ro extended-nexthop-encode?     empty
|      | | +--ro mapped-peer-group-tag-af?    string
|      | | +--ro unsuppress-route-map-name?   string
|      | | +--ro max-paths-ibgp?              int16
|      | | +--ro configured-max-paths-ebgp?   int16
|      | | +--ro max-paths-ebgp?              int16
|      | | +--ro configured-max-paths-ibgp?   int16
|      | | +--ro max-paths-eibgp?             int16
|      | | +--ro configured-max-paths-eibgp?  int16

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```

|   | +--ro community-count?          int32
|   | +--ro confederation-id-check?    boolean
|   | +--ro peer-and-extended-asn-capability?  ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro address-family-capability?  ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro ipv6-next-hop-global?      inet:ipv6-address
|   | +--ro ipv6-next-hop-local?      inet:ipv6-address
|   | +--ro remote-port?              int32
|   | +--ro remote-address?           ipi-bgp-types:bgp_hostname_t
|   | +--ro local-host?               ipi-bgp-types:bgp_hostname_t
|   | +--ro ipv4-next-hop?            inet:ipv4-address
|   | +--ro local-port?              int32
|   | +--ro default-information-originate?  boolean
|   | +--ro inbound-path-policy?      boolean
|   | +--ro outbound-path-policy?     boolean
|   | +--ro default-originate-information-sent?  cml-data-types:cml_line_t
|   | +--ro graceful-restart?        ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro address-family-dependent-capability?  boolean
|   | +--ro peer-address-family-table-version?  int32
|   | +--ro address-family-table-version?  int32
|   | +--ro forward-status-preserve?    string
|   | +--ro orf-type-prefix?          cml-data-types:cml_line_t
|   | +--ro orf-type-prefix-send-mode?  ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro orf-type-prefix-receive-mode?  ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro orf-type-prefix-old?      cml-data-types:cml_line_t
|   | +--ro orf-type-prefix-send-mode-old?  ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro orf-type-prefix-receive-mode-old?  ipi-bgp-types:bgp_adv_rcv_type_t
|   | +--ro prefix-count?            int32
|   | +--ro send-prefix-count?       int32
|   | +--ro flag-shut-down?          ipi-bgp-types:bgp_peerflag_shutdown_t
|   | +--ro count?                  int32
|   | +--ro notify-info?            boolean
|   | +--ro notify-last-reset-time?   string
|   | +--ro connection-type?         ipi-bgp-types:bgp_connection_type_t
|   | +--ro next-connection-timer?    int32
|   | +--ro connection-dropped-count?  int32
|   | +--ro graceful-restart-status?  string

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|   | ++ro graceful-restart-time?      int32
|   | ++ro bgp-established-up-time?    string
|   | ++ro last-read-time?             string
|   | ++ro link-type?                  ipi-bgp-types:bgp_link_type_t
|   | ++ro ebgp-hop-away-count?        int32
|   | ++ro router-id?                  inet:ipv4-address
|   | ++ro advertisement-interval?     int32
|   | ++ro calculated-hold-time?       int32
|   | ++ro calculated-keepalive?       int32
|   | ++ro dynamic-capability?         cml-data-types:cml_line_t
|   | ++ro route-refresh-capability?   ipi-bgp-types:bgp_route_refresh_cap_type_t
|   | ++ro no-interface-binding?       boolean
|   | ++ro additional-path-receive-capability? string {feature-list:HAVE_BGP_ADD_PATH}?
|   | ++ro additional-path-send-capability? string {feature-list:HAVE_BGP_ADD_PATH}?
|   | ++ro capability-ipv4-unicast?     ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-ipv4-multicast?   ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-vpnv4-unicast?    ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-vpnv6-unicast?    ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-rtfilter-unicast? ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-l2vpn-evpn?       ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-ipv6-unicast?     ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-ipv6-multicast?   ipi-bgp-types:bgp_capability_type_t
|   | ++ro capability-ipv6-label-unicast? ipi-bgp-types:bgp_capability_type_t
|   | ++ro evpn-ad-route-count?         uint32 {feature-list:HAVE_BGP_EVPN}?
|   | ++ro evpn-mac-ip-route-count?     uint32 {feature-list:HAVE_BGP_EVPN}?
|   | ++ro evpn-inclusive-multicast-route-count? uint32 {feature-list:HAVE_BGP_EVPN}?
|   | ++ro evpn-segment-route-count?    uint32 {feature-list:HAVE_BGP_EVPN}?
|   | ++ro evpn-ip-prefix-route-count?  uint32 {feature-list:HAVE_BGP_EVPN}?
|   ++rw maximum-prefixes
|   | ++rw maximum-prefix* [prefix-count]
|   |   ++rw prefix-count  -> ../config/prefix-count
|   |   ++rw config
|   | | ++rw prefix-count?      uint32
|   | | ++rw stop-update?      empty
|   | | ++rw maximum-prefix-warning? empty
|   | | ++rw threshold-percentage? uint8

```

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```

|   | | +--rw warning-only?      empty
|   | +--ro state
|   |   +--ro prefix-count?      uint32
|   |   +--ro stop-update?       empty
|   |   +--ro maximum-prefix-warning? empty
|   |   +--ro threshold-percentage? uint8
|   |   +--ro warning-only?      empty
|   +--rw distribute-list-filters
|   | +--rw distribute-list-filter* [filter-direction]
|   |   +--rw filter-direction -> ../config/filter-direction
|   |   +--rw config
|   |   | +--rw access-list-identifier string
|   |   | +--rw filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|   |   +--ro state
|   |   | +--ro access-list-identifier string
|   |   | +--ro filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|   +--rw as-list-filters
|   | +--rw as-list-filter* [as-list-direction]
|   |   +--rw as-list-direction -> ../config/as-list-direction
|   |   +--rw config
|   |   | +--rw as-access-list-identifier string
|   |   | +--rw as-list-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|   |   +--ro state
|   |   | +--ro as-access-list-identifier string
|   |   | +--ro as-list-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|   +--rw prefix-list-filters
|   | +--rw prefix-list-filter* [prefix-filter-direction]
|   |   +--rw prefix-filter-direction -> ../config/prefix-filter-direction
|   |   +--rw config
|   |   | +--rw prefix-list-name      string
|   |   | +--rw prefix-filter-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   |   +--ro state
|   |   | +--ro prefix-list-name      string
|   |   | +--ro prefix-filter-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   +--rw route-map-filters
|   | +--rw route-map-filter* [route-map-direction]

```

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```

|   |   +--rw route-map-direction -> ../config/route-map-direction
|   |   +--rw config
|   |   |   +--rw route-map-name      string
|   |   |   +--rw route-map-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   |   +--ro state
|   |       +--ro route-map-name      string
|   |       +--ro route-map-direction? ipi-bgp-types:bgp_distribute_list_direction_t
|   +--ro outbound-route-filter
|   |   +--ro state
|   |       +--ro orf-prefix-string?  boolean
|   |       +--ro orf-prefix-send?    string
|   |       +--ro orf-prefix-count?   string
|   |       +--ro orf-wait-refresh?   boolean
|   +--ro peer-prefix
|   |   +--ro state
|   |       +--ro entry-sequence?     int32
|   |       +--ro entry-type?         ipi-bgp-types:bgp_prefix_entry_type_t
|   |       +--ro entry-max-length?   int32
|   |       +--ro entry-min-length?   int32
|   |       +--ro prefix-length?      int32
|   +--ro peer-index
|   |   +--ro state
|   |       +--ro peer-index?         int32
|   |       +--ro offset?             int32
|   |       +--ro mask?               string
|   +--rw aigp {feature-list:HAVE_BGP_AIGP}?
|       +--rw config
|           +--rw admin-status?      cml-data-types:cml_enable_disable_t {feature-list:HAVE_BGP_AIGP}?
|           +--rw aigp-send-med?     empty
|       +--ro state
|           +--ro admin-status?      cml-data-types:cml_enable_disable_t {feature-list:HAVE_BGP_AIGP}?
|           +--ro aigp-send-med?     empty
|       +--rw cost-community {feature-list:HAVE_BGP_AIGP}?
|           +--rw config!
|               +--rw send-cost-community-id  uint8 {feature-list:HAVE_BGP_AIGP}?
|               +--rw point-of-insertion      ipi-bgp-types:bgp_aigp_metric_cost_community_poi_t {feature-
list:HAVE_BGP_AIGP}?

```

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```

|          | +--rw enable-transitive?    empty {feature-list:HAVE_BGP_AIGP}?
|          +--ro state
|          +--ro send-cost-community-id  uint8 {feature-list:HAVE_BGP_AIGP}?
|          +--ro point-of-insertion      ipi-bgp-types:bgp_aigp_metric_cost_community_poi_t {feature-
list:HAVE_BGP_AIGP}?
|          +--ro enable-transitive?      empty {feature-list:HAVE_BGP_AIGP}?
+--rw address-family-vrfs
+--rw address-family-vrf* [afi safi vrf-name]
+--rw afi                  -> ../config/afi
+--rw safi                 -> ../config/safi
+--rw vrf-name             -> ../config/vrf-name
+--rw config
| +--rw enable-auto-summary?          empty
| +--rw enable-network-igp-sync?      empty
| +--rw enable-igp-sync?              empty
| +--rw enable-bgp-implicit-null?     empty
| +--rw afi?                         ipi-bgp-types:bgp_vrf_afi_type_t
| +--rw safi?                       ipi-bgp-types:bgp_vrf_safi_type_t
| +--rw vrf-name?                   string
| +--rw multipath-relax?             empty
| +--rw graceful-shutdown?          empty
| +--rw graceful-shutdown-capable?   empty
| +--rw graceful-shutdown-local-preference? uint32
| +--rw additional-paths-mode?       ipi-bgp-types:bgp_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| +--rw additional-path-select-all?  empty {feature-list:HAVE_BGP_ADD_PATH}?
| +--rw additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
+--ro state
| +--ro enable-auto-summary?          empty
| +--ro enable-network-igp-sync?      empty
| +--ro enable-igp-sync?              empty
| +--ro enable-bgp-implicit-null?     empty
| +--ro afi?                         ipi-bgp-types:bgp_vrf_afi_type_t
| +--ro safi?                       ipi-bgp-types:bgp_vrf_safi_type_t
| +--ro vrf-name?                   string
| +--ro multipath-relax?             empty
| +--ro graceful-shutdown?          empty

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```

| +--ro graceful-shutdown-capable?      empty
| +--ro graceful-shutdown-local-preference? uint32
| +--ro additional-paths-mode?          ipi-bgp-types:bgp_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| +--ro additional-path-select-all?    empty {feature-list:HAVE_BGP_ADD_PATH}?
| +--ro additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
+--rw confederation
| +--rw config
| | +--rw identifier?    uint32
| | +--rw peer-as-number* uint32
| +--ro state
|   +--ro identifier?    uint32
|   +--ro peer-as-number* uint32
+--rw distances
| +--rw distance* [ebgp ibgp local]
|   +--rw ebgp    -> ../config/ebgp
|   +--rw ibgp    -> ../config/ibgp
|   +--rw local   -> ../config/local
|   +--rw config
|     | +--rw ebgp?    uint8
|     | +--rw ibgp?    uint8
|     | +--rw local?   uint8
|     +--ro state
|       +--ro ebgp?    uint8
|       +--ro ibgp?    uint8
|       +--ro local?   uint8
+--rw maximum-paths
| +--rw config
| | +--rw ebgp-max-path? int32
| | +--rw ibgp-max-path? int32
| | +--rw eibgp-max-path? int32
| +--ro state
|   +--ro ebgp-max-path? int32
|   +--ro ibgp-max-path? int32
|   +--ro eibgp-max-path? int32
+--rw table-map {feature-list:HAVE_BGP_TABLE_MAP}?
| +--rw config!

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```

| | +--rw map-name          string {feature-list:HAVE_BGP_TABLE_MAP}?
| | +--rw table-map-filter? boolean {feature-list:HAVE_BGP_TABLE_MAP}?
| +--ro state
|   +--ro map-name          string {feature-list:HAVE_BGP_TABLE_MAP}?
|   +--ro table-map-filter? boolean {feature-list:HAVE_BGP_TABLE_MAP}?
+--rw route-flap-dampenings
| +--rw route-flap-dampening* [enable-dampening]
|   +--rw enable-dampening  -> ../config/enable-dampening
|   +--rw config
|     | +--rw enable-dampening?   ipi-bgp-types:bgp_dampening_t
|     | +--rw reach-half-life?    uint32
|     | +--rw reuse-penalty?      uint32
|     | +--rw suppress-penalty?   uint32
|     | +--rw max-suppress-time?  uint32
|     | +--rw unreach-half-life?  uint32
|     | +--rw dampening-rmap-name? string
|     +--ro state
|       +--ro enable-dampening?   ipi-bgp-types:bgp_dampening_t
|       +--ro reach-half-life?    uint32
|       +--ro reuse-penalty?      uint32
|       +--ro suppress-penalty?   uint32
|       +--ro max-suppress-time?  uint32
|       +--ro unreach-half-life?  uint32
|       +--ro dampening-rmap-name? string
+--rw route-redistribute-lists
| +--rw route-redistribute-list* [protocol-type]
|   +--rw protocol-type  -> ../config/protocol-type
|   +--rw config
|     | +--rw protocol-type?      ipi-bgp-types:bgp_redistribute_type_t
|     | +--rw redist-route-map-name? string
|     +--ro state
|       +--ro protocol-type?      ipi-bgp-types:bgp_redistribute_type_t
|       +--ro redist-route-map-name? string
+--rw bgp-redistribute-ospfs
| +--rw bgp-redistribute-ospf* [ospf-instance-number]
|   +--rw ospf-instance-number  -> ../config/ospf-instance-number

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```

|   +--rw config
|   |   +--rw ospf-instance-number?      ipi-bgp-types:cml_ospf_area_id_t
|   |   +--rw redistribute-ospf-route-map? string
|   +--ro state
|   |   +--ro ospf-instance-number?      ipi-bgp-types:cml_ospf_area_id_t
|   |   +--ro redistribute-ospf-route-map? string
+--rw vrf-peers
| +--rw vrf-peer* [peer-address]
|   +--rw peer-address      -> ../config/peer-address
|   +--ro peer-adj-out-route* [network-address]
|   |   +--ro network-address  -> ../state/network-address
|   |   +--ro next-hop* [next-hop-address]
|   |   |   +--ro next-hop-address  -> ../state/next-hop-address
|   |   |   +--ro state
|   |   |   |   +--ro next-hop-address?      ipi-bgp-types:bgp_hostname_t
|   |   |   |   +--ro peer-network-weight?    uint32
|   |   |   |   +--ro flap-time-reuse-list?    string
|   |   |   |   +--ro flap-record-duration?    string
|   |   |   |   +--ro damp-time-to-reuse?      string
|   |   |   |   +--ro bgp-med-value?          uint32
|   |   |   |   +--ro bgp-as-path-string*      cml-data-types:cml_line_t
|   |   |   |   +--ro bgp-as-path-4-byte-string* string
|   |   |   |   +--ro bgp-as-path-4-byte-origin? ipi-bgp-types:bgp_origin_t
|   |   |   |   +--ro ibgp-metric-route?      int32
|   |   |   |   +--ro aggregate-as-route?      int32
|   |   |   |   +--ro aggregator-address-route? ipi-bgp-types:bgp_hostname_t
|   |   |   |   +--ro network-remote-address-route? ipi-bgp-types:bgp_hostname_t
|   |   |   |   +--ro originator-id-route?     ipi-bgp-types:bgp_hostname_t
|   |   |   |   +--ro route-peer-address?      ipi-bgp-types:bgp_hostname_t
|   |   |   |   +--ro route-local-preference?  uint32
|   |   |   |   +--ro route-prefix-label?      uint32
|   |   |   |   +--ro route-community-string?  string
|   |   |   |   +--ro cluster-list-route*      ipi-bgp-types:bgp_hostname_t
|   |   |   |   +--ro route-penalty?          int32
|   |   |   |   +--ro route-flap-count?        int32
|   |   |   |   +--ro last-update-route?      yang:date-and-time

```

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```

| | | +--ro reflector-client-route?      boolean
| | | +--ro route-dampening-active?      boolean
| | | +--ro history-route?              boolean
| | | +--ro nexthop-valid-route?        boolean
| | | +--ro med-flag-type-route?        boolean
| | | +--ro valid-route?                boolean
| | | +--ro stale-route?                boolean
| | | +--ro route-type?                 ipi-bgp-types:bgp_ri_type_t
| | | +--ro ecmp-multi-candidate-route?  boolean
| | | +--ro multi-installed-route?      boolean
| | | +--ro route-synchronized-flag-route? boolean
| | | +--ro atomic-aggregate-route?     boolean
| | | +--ro selected-route?             boolean
| | | +--ro bgp-tx-path-id?             int16 {feature-list:HAVE_BGP_ADD_PATH}?
| | | +--ro bgp-rx-path-id?             int16 {feature-list:HAVE_BGP_ADD_PATH}?
| | | +--ro ipv4-multicast-capability?   string
| | | +--ro vpv4-unicast-capability?    string
| | | +--ro rtfiler-unicast-capability?  string
| | | +--ro l2vpn-evpn-capability?      string
| | | +--ro ipv6-unicast-capability?     string
| | | +--ro ipv6-multicast-capability?   string
| | | +--ro ipv6-label-unicast-capability? string
| | +--ro state
| |   +--ro network-address? ipi-bgp-types:bgp_ip_network_t
| +--ro peer-adj-in-route* [network-address]
| | +--ro network-address -> ../state/network-address
| | +--ro next-hop* [next-hop-address]
| | | +--ro next-hop-address -> ../state/next-hop-address
| | | +--ro state
| | |   +--ro next-hop-address? ipi-bgp-types:bgp_hostname_t
| | |   +--ro peer-network-weight? uint32
| | |   +--ro flap-time-reuse-list? string
| | |   +--ro flap-record-duration? string
| | |   +--ro damp-time-to-reuse? string
| | |   +--ro bgp-med-value? uint32
| | |   +--ro bgp-as-path-string* cml-data-types:cml_line_t

```

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```

| | | +--ro bgp-as-path-4-byte-string*   string
| | | +--ro bgp-as-path-4-byte-origin?   ipi-bgp-types:bgp_origin_t
| | | +--ro ibgp-metric-route?           int32
| | | +--ro aggregate-as-route?          int32
| | | +--ro aggregator-address-route?    ipi-bgp-types:bgp_hostname_t
| | | +--ro network-remote-address-route? ipi-bgp-types:bgp_hostname_t
| | | +--ro originator-id-route?         ipi-bgp-types:bgp_hostname_t
| | | +--ro route-peer-address?          ipi-bgp-types:bgp_hostname_t
| | | +--ro route-local-preference?      uint32
| | | +--ro route-prefix-label?          uint32
| | | +--ro route-community-string?      string
| | | +--ro cluster-list-route*          ipi-bgp-types:bgp_hostname_t
| | | +--ro route-penalty?               int32
| | | +--ro route-flap-count?            int32
| | | +--ro last-update-route?           yang:date-and-time
| | | +--ro reflector-client-route?      boolean
| | | +--ro route-dampening-active?      boolean
| | | +--ro history-route?               boolean
| | | +--ro nexthop-valid-route?         boolean
| | | +--ro med-flag-type-route?         boolean
| | | +--ro valid-route?                 boolean
| | | +--ro stale-route?                 boolean
| | | +--ro route-type?                  ipi-bgp-types:bgp_ri_type_t
| | | +--ro ecmp-multi-candidate-route?  boolean
| | | +--ro multi-installed-route?       boolean
| | | +--ro route-synchronized-flag-route? boolean
| | | +--ro atomic-aggregate-route?      boolean
| | | +--ro selected-route?              boolean
| | | +--ro bgp-tx-path-id?              int16 {feature-list:HAVE_BGP_ADD_PATH}?
| | | +--ro bgp-rx-path-id?              int16 {feature-list:HAVE_BGP_ADD_PATH}?
| | | +--ro ipv4-multicast-capability?   string
| | | +--ro vpv4-unicast-capability?     string
| | | +--ro rfilter-unicast-capability?  string
| | | +--ro l2vpn-evpn-capability?       string
| | | +--ro ipv6-unicast-capability?     string
| | | +--ro ipv6-multicast-capability?   string

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```

| | | +--ro ipv6-label-unicast-capability? string
| | +--ro state
| | +--ro network-address? ipi-bgp-types:bgp_ip_network_t
| +--rw config
| | +--rw peer-address?          inet:ip-address
| | +--rw peer-as?              uint32
| | +--rw source-identifier?    string
| | +--rw bgp-version?         uint8
| | +--rw peer-connection-interval? uint32
| | +--rw enforce-multihop?     empty
| | +--rw peer-shutdown?       empty
| | +--rw peer-shutdown-description? cml-data-types:cml_line_t
| | +--rw neighbor-passive?     empty
| | +--rw disable-capability-negotiation? empty
| | +--rw enable-dynamic-capability? empty
| | +--rw min-route-advertisement-interval? uint32
| | +--rw peer-as-origin-interval? uint32
| | +--rw neighbor-as-override? empty
| | +--rw peer-interface-name?  string {feature-list:HAVE_VRF}?
| | +--rw peer-description?     cml-data-types:cml_line_t
| | +--rw peer-restart-time?    uint32 {feature-list:HAVE_RESTART,feature-list:HAVE_VRF}?
| | +--rw graceful-shut?       empty
| | +--rw graceful-shut-timer?  uint32
| | +--rw enable-peer-bfd?      empty {feature-list:HAVE_BFD}?
| | +--rw enable-peer-bfd-multihop? empty {feature-list:HAVE_BFD}?
| | +--rw bgp-port?            uint16
| | +--rw activate?            empty
| | +--rw de-activate?         empty
| | +--rw default-peer-route-map-name? empty
| | +--rw peer-route-map-orig-name?  string
| | +--rw weight?              uint16
| | +--rw peer-route-reflector?    empty
| | +--rw peer-remove-private-as?  empty
| | +--rw no-send-community?      empty
| | +--rw no-send-community-type?  ipi-bgp-types:bgp_send_commu_type_t
| | +--rw neighbor-attribute-unchanged? ipi-bgp-types:bgp_attribute_unchanged_type_t

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```

| | +--rw orf-prefix-capability?      ipi-bgp-types:bgp_orf_prefix_type_t
| | +--rw peer-allow-ebgp-vpn?        empty {feature-list:HAVE_VRF}?
| | +--rw allow-as-number?            uint32
| | +--rw capability-graceful-restart? empty
| | +--rw mapped-peer-group-tag-af?    string
| | +--rw unsuppress-route-map-name?   string
| | +--rw enable-ext-opt-param-len?    empty
| | +--rw additional-paths-mode?       ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| | +--rw additional-path-select-all? empty {feature-list:HAVE_BGP_ADD_PATH}?
| | +--rw additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
| | +--rw tcp-adjust-mss?              uint16
| | +--rw site-origin-identifier?      string {feature-list:HAVE_VRF}?
| +--ro state
| | +--ro counters
| | | +--ro keepalive-in-messages?    int32
| | | +--ro keepalive-out-messages?   int32
| | | +--ro open-messages-in?         int32
| | | +--ro open-messages-out?        int32
| | | +--ro as-path-count?            int32
| | | +--ro as-path-extended-count?   int32
| | | +--ro received-packet-count?    int32
| | | +--ro packet-in-queue?          int32
| | | +--ro packet-out-queue?         int32
| | | +--ro sent-packet-count?        int32
| | | +--ro refresh-received-packet-count? int32
| | | +--ro refresh-sent-packet-count? int32
| | | +--ro notification-in?          int32
| | | +--ro notification-out?         int32
| | | +--ro update-message-in?        int32
| | | +--ro update-message-out?       int32
| | +--ro peer-address?               inet:ip-address
| | +--ro peer-as?                    uint32
| | +--ro source-identifier?           string
| | +--ro bgp-version?                uint8
| | +--ro peer-connection-interval?   uint32
| | +--ro enforce-multihop?           empty

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```

| | +--ro peer-shutdown?          empty
| | +--ro peer-shutdown-description?  cml-data-types:cml_line_t
| | +--ro neighbor-passive?        empty
| | +--ro disable-capability-negotiation?  empty
| | +--ro enable-dynamic-capability?  empty
| | +--ro min-route-advertisement-interval?  uint32
| | +--ro peer-as-origin-interval?    uint32
| | +--ro neighbor-as-override?      empty
| | +--ro peer-interface-name?       string {feature-list:HAVE_VRF}?
| | +--ro peer-description?          cml-data-types:cml_line_t
| | +--ro peer-restart-time?         uint32 {feature-list:HAVE_RESTART,feature-list:HAVE_VRF}?
| | +--ro graceful-shut?            empty
| | +--ro graceful-shut-timer?       uint32
| | +--ro enable-peer-bfd?           empty {feature-list:HAVE_BFD}?
| | +--ro enable-peer-bfd-multihop?   empty {feature-list:HAVE_BFD}?
| | +--ro bgp-port?                 uint16
| | +--ro activate?                 empty
| | +--ro de-activate?              empty
| | +--ro default-peer-route-map-name?  empty
| | +--ro peer-route-map-orig-name?    string
| | +--ro weight?                   uint16
| | +--ro peer-route-reflector?       empty
| | +--ro peer-remove-private-as?     empty
| | +--ro no-send-community?          empty
| | +--ro no-send-community-type?     ipi-bgp-types:bgp_send_commu_type_t
| | +--ro neighbor-attribute-unchanged?  ipi-bgp-types:bgp_attribute_unchanged_type_t
| | +--ro orf-prefix-capability?      ipi-bgp-types:bgp_orf_prefix_type_t
| | +--ro peer-allow-ebgp-vpn?        empty {feature-list:HAVE_VRF}?
| | +--ro allow-as-number?           uint32
| | +--ro capability-graceful-restart?  empty
| | +--ro mapped-peer-group-tag-af?    string
| | +--ro unsuppress-route-map-name?   string
| | +--ro enable-ext-opt-param-len?    empty
| | +--ro additional-paths-mode?       ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| | +--ro additional-path-select-all?  empty {feature-list:HAVE_BGP_ADD_PATH}?
| | +--ro additional-paths-best-select-count?  uint8 {feature-list:HAVE_BGP_ADD_PATH}?

```

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		++ro tcp-adjust-mss?	uint16
		++ro site-origin-identifier?	string {feature-list:HAVE_VRF}?
		++ro connection-established-count?	int32
		++ro error-notify-sent?	boolean
		++ro notify-code-string?	cml-data-types:cml_line_t
		++ro bgp-peer-state?	ipi-bgp-types:bgp_peer_status_t
		++ro max-paths-ibgp?	int16
		++ro configured-max-paths-ebgp?	int16
		++ro max-paths-ebgp?	int16
		++ro configured-max-paths-ibgp?	int16
		++ro max-paths-eibgp?	int16
		++ro configured-max-paths-eibgp?	int16
		++ro community-count?	int32
		++ro confederation-id-check?	boolean
		++ro peer-and-extended-asn-capability?	ipi-bgp-types:bgp_adv_rcv_type_t
		++ro address-family-capability?	ipi-bgp-types:bgp_adv_rcv_type_t
		++ro ipv6-next-hop-global?	inet:ipv6-address
		++ro ipv6-next-hop-local?	inet:ipv6-address
		++ro remote-port?	int32
		++ro remote-address?	ipi-bgp-types:bgp_hostname_t
		++ro local-host?	ipi-bgp-types:bgp_hostname_t
		++ro ipv4-next-hop?	inet:ipv4-address
		++ro local-port?	int32
		++ro default-information-originate?	boolean
		++ro inbound-path-policy?	boolean
		++ro outbound-path-policy?	boolean
		++ro default-originate-information-sent?	cml-data-types:cml_line_t
		++ro graceful-restart?	ipi-bgp-types:bgp_adv_rcv_type_t
		++ro address-family-dependent-capability?	boolean
		++ro peer-address-family-table-version?	int32
		++ro address-family-table-version?	int32
		++ro forward-status-preserve?	string
		++ro orf-type-prefix?	cml-data-types:cml_line_t
		++ro orf-type-prefix-send-mode?	ipi-bgp-types:bgp_adv_rcv_type_t
		++ro orf-type-prefix-receive-mode?	ipi-bgp-types:bgp_adv_rcv_type_t
		++ro orf-type-prefix-old?	cml-data-types:cml_line_t

---

---

```

| | +-ro orf-type-prefix-send-mode-old?      ipi-bgp-types:bgp_adv_rcv_type_t
| | +-ro orf-type-prefix-receive-mode-old?    ipi-bgp-types:bgp_adv_rcv_type_t
| | +-ro prefix-count?                       int32
| | +-ro send-prefix-count?                   int32
| | +-ro flag-shut-down?                      ipi-bgp-types:bgp_peerflag_shutdown_t
| | +-ro count?                              int32
| | +-ro notify-info?                        boolean
| | +-ro notify-last-reset-time?              string
| | +-ro connection-type?                    ipi-bgp-types:bgp_connection_type_t
| | +-ro next-connection-timer?               int32
| | +-ro connection-dropped-count?            int32
| | +-ro graceful-restart-status?             string
| | +-ro graceful-restart-time?               int32
| | +-ro bgp-established-up-time?             string
| | +-ro last-read-time?                      string
| | +-ro link-type?                          ipi-bgp-types:bgp_link_type_t
| | +-ro ebgp-hop-away-count?                 int32
| | +-ro router-id?                          inet:ipv4-address
| | +-ro advertisement-interval?              int32
| | +-ro calculated-hold-time?                 int32
| | +-ro calculated-keepalive?                int32
| | +-ro dynamic-capability?                  cml-data-types:cml_line_t
| | +-ro route-refresh-capability?            ipi-bgp-types:bgp_route_refresh_cap_type_t
| | +-ro no-interface-binding?                boolean
| | +-ro additional-path-receive-capability?  string {feature-list:HAVE_BGP_ADD_PATH}?
| | +-ro additional-path-send-capability?     string {feature-list:HAVE_BGP_ADD_PATH}?
| | +-ro capability-ipv4-unicast?              ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-ipv4-multicast?            ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-vpnv4-unicast?             ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-vpnv6-unicast?             ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-rtfilter-unicast?          ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-l2vpn-evpn?                ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-ipv6-unicast?              ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-ipv6-multicast?            ipi-bgp-types:bgp_capability_type_t
| | +-ro capability-ipv6-label-unicast?        ipi-bgp-types:bgp_capability_type_t
| | +-ro evpn-ad-route-count?                  uint32 {feature-list:HAVE_BGP_EVPN}?

```

---

---

```

| | +-ro evpn-mac-ip-route-count?      uint32 {feature-list:HAVE_BGP_EVPN}?
| | +-ro evpn-inclusive-multicast-route-count?  uint32 {feature-list:HAVE_BGP_EVPN}?
| | +-ro evpn-segment-route-count?      uint32 {feature-list:HAVE_BGP_EVPN}?
| | +-ro evpn-ip-prefix-route-count?      uint32 {feature-list:HAVE_BGP_EVPN}?
| +-rw timers
| | +-rw config!
| | | +-rw keep-alive  uint16
| | | +-rw hold-time   uint16
| | +-ro state
| |   +-ro keep-alive  uint16
| |   +-ro hold-time   uint16
| +-rw ebgp-multihop
| | +-rw config!
| | | +-rw maximum-hop-count?  uint8
| | | +-rw enabled             empty
| | +-ro state
| |   +-ro maximum-hop-count?  uint8
| |   +-ro enabled             empty
| +-rw maximum-prefixes
| | +-rw maximum-prefix* [prefix-count]
| |   +-rw prefix-count  -> ../config/prefix-count
| |   +-rw config
| | | +-rw prefix-count?      uint32
| | | +-rw stop-update?      empty
| | | +-rw maximum-prefix-warning?  empty
| | | +-rw threshold-percentage?  uint8
| | | +-rw warning-only?      empty
| | +-ro state
| |   +-ro prefix-count?      uint32
| |   +-ro stop-update?      empty
| |   +-ro maximum-prefix-warning?  empty
| |   +-ro threshold-percentage?  uint8
| |   +-ro warning-only?      empty
| +-rw bgp-passwords
| | +-rw bgp-password* [password]
| |   +-rw password  -> ../config/password

```

---

```

| | +--rw config
| | | +--rw password?      ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
| | | +--rw auth-key-encrypt ipi-bgp-types:bgp_md5_t
| | +--ro state
| |   +--ro password?      ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
| |   +--ro auth-key-encrypt ipi-bgp-types:bgp_md5_t
| +--rw distribute-list-filters
| | +--rw distribute-list-filter* [filter-direction]
| |   +--rw filter-direction -> ../config/filter-direction
| |   +--rw config
| | | +--rw access-list-identifier string
| | | +--rw filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
| | +--ro state
| |   +--ro access-list-identifier string
| |   +--ro filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
| +--rw as-list-filters
| | +--rw as-list-filter* [as-list-direction]
| |   +--rw as-list-direction -> ../config/as-list-direction
| |   +--rw config
| | | +--rw as-access-list-identifier string
| | | +--rw as-list-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
| | +--ro state
| |   +--ro as-access-list-identifier string
| |   +--ro as-list-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
| +--rw prefix-list-filters
| | +--rw prefix-list-filter* [prefix-filter-direction]
| |   +--rw prefix-filter-direction -> ../config/prefix-filter-direction
| |   +--rw config
| | | +--rw prefix-list-name      string
| | | +--rw prefix-filter-direction? ipi-bgp-types:bgp_distribute_list_direction_t
| | +--ro state
| |   +--ro prefix-list-name      string
| |   +--ro prefix-filter-direction? ipi-bgp-types:bgp_distribute_list_direction_t
| +--rw route-map-filters
| | +--rw route-map-filter* [route-map-direction]
| |   +--rw route-map-direction -> ../config/route-map-direction

```

---

```

| | +--rw config
| | | +--rw route-map-name      string
| | | +--rw route-map-direction? ipi-bgp-types:bgp_distribute_list_direction_t
| | +--ro state
| |   +--ro route-map-name      string
| |   +--ro route-map-direction? ipi-bgp-types:bgp_distribute_list_direction_t
| +--rw local-as
| | +--rw local-as-list* [peer-local-as]
| |   +--rw peer-local-as  -> ../config/peer-local-as
| |   +--rw config
| |     | +--rw peer-local-as?    uint32
| |     | +--rw no-prepend-local-as? empty
| |     | +--rw replace-local-as? empty
| |     +--ro state
| |       +--ro peer-local-as?    uint32
| |       +--ro no-prepend-local-as? empty
| |       +--ro replace-local-as? empty
| +--ro outbound-route-filter
| | +--ro state
| |   +--ro orf-prefix-string?  boolean
| |   +--ro orf-prefix-send?    string
| |   +--ro orf-prefix-count?   string
| |   +--ro orf-wait-refresh?   boolean
| +--ro peer-prefix
| | +--ro state
| |   +--ro entry-sequence?     int32
| |   +--ro entry-type?         ipi-bgp-types:bgp_prefix_entry_type_t
| |   +--ro entry-max-length?   int32
| |   +--ro entry-min-length?   int32
| |   +--ro prefix-length?      int32
| +--ro peer-index
|   +--ro state
|     +--ro peer-index? int32
|     +--ro offset?     int32
|     +--ro mask?       string
+--rw network-lists

```



---

```

| +--rw network-list* [local-network-prefix]
|   +--rw local-network-prefix  -> ../config/local-network-prefix
|   +--rw config
|     | +--rw local-network-prefix?  ipi-bgp-types:bgp_ip_network_t
|     | +--rw network-rmap-name?    string
|     | +--rw backdoor?             empty
|     +--ro state
|       +--ro local-network-prefix?    ipi-bgp-types:bgp_ip_network_t
|       +--ro network-rmap-name?       string
|       +--ro backdoor?                empty
|       +--ro network-path-route-count? int32
|       +--ro no-advertise-route?      string
|       +--ro no-export-route?         boolean
|       +--ro local-as-route?          boolean
|       +--ro suppress-route?          boolean
|       +--ro network-best-path-route-count? int32
|       +--ro ip-routing-table?        string
|       +--ro advertised-non-peer-group-address* ipi-bgp-types:bgp_hostname_t
|       +--ro advertised-peer-group-name-route* string
|       +--ro advertised-any-peer?     boolean
+--rw peer-groups
  +--rw peer-group* [peer-group-tag]
    +--rw peer-group-tag  -> ../config/peer-group-tag
    +--rw config
      | +--rw bgp-port?          uint16
      | +--rw activate?          empty
      | +--rw default-peer-route-map-name?    empty
      | +--rw peer-route-map-orig-name?       string
      | +--rw weight?              uint16
      | +--rw peer-route-reflector?    empty
      | +--rw peer-remove-private-as?    empty
      | +--rw no-send-community?        empty
      | +--rw no-send-community-type?    ipi-bgp-types:bgp_send_commu_type_t
      | +--rw neighbor-attribute-unchanged? ipi-bgp-types:bgp_attribute_unchanged_type_t
      | +--rw orf-prefix-capability?    ipi-bgp-types:bgp_orf_prefix_type_t
      | +--rw peer-allow-ebgp-vpn?      empty {feature-list:HAVE_VRF}?

```

---

---

```

| +-rw allow-as-number?          uint32
| +-rw capability-graceful-restart?  empty
| +-rw unsuppress-route-map-name?    string
| +-rw additional-paths-mode?        ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| +-rw additional-path-select-all?  empty {feature-list:HAVE_BGP_ADD_PATH}?
| +-rw additional-paths-best-select-count?  uint8 {feature-list:HAVE_BGP_ADD_PATH}?
| +-rw site-origin-identifier?       string {feature-list:HAVE_VRF}?
| +-rw peer-group-range              ipi-bgp-types:bgp_peer_group_type_t
| +-rw group-limit?                  uint8
| +-rw peer-group-tag?                string
| +-rw peer-as?                       uint32
| +-rw source-identifier?             string
| +-rw bgp-version?                   uint8
| +-rw peer-connection-interval?      uint32
| +-rw enforce-multihop?              empty
| +-rw peer-shutdown?                 empty
| +-rw peer-shutdown-description?     cml-data-types:cml_line_t
| +-rw neighbor-passive?              empty
| +-rw disable-capability-negotiation? empty
| +-rw connection-retry-interval?     int32
| +-rw enable-dynamic-capability?     empty
| +-rw min-route-advertisement-interval?  uint32
| +-rw peer-as-origin-interval?        uint32
| +-rw neighbor-as-override?          empty
| +-rw peer-description?              cml-data-types:cml_line_t
| +-rw peer-restart-time?              uint32 {feature-list:HAVE_RESTART,feature-list:HAVE_VRF}?
| +-rw graceful-shut?                 empty
| +-rw graceful-shut-timer?           uint32
| +-rw enable-peer-bfd?                empty {feature-list:HAVE_BFD}?
| +-rw enable-peer-bfd-multihop?       empty {feature-list:HAVE_BFD}?
| +-rw enable-ext-opt-param-len?       empty
| +-rw tcp-adjust-mss?                 uint16
+--ro state
| +-ro bgp-port?                      uint16
| +-ro activate?                      empty
| +-ro default-peer-route-map-name?    empty

```

---

---

```

| +-ro peer-route-map-orig-name?      string
| +-ro weight?                        uint16
| +-ro peer-route-reflector?          empty
| +-ro peer-remove-private-as?        empty
| +-ro no-send-community?             empty
| +-ro no-send-community-type?        ipi-bgp-types:bgp_send_commu_type_t
| +-ro neighbor-attribute-unchanged?  ipi-bgp-types:bgp_attribute_unchanged_type_t
| +-ro orf-prefix-capability?         ipi-bgp-types:bgp_orf_prefix_type_t
| +-ro peer-allow-ebgp-vpn?           empty {feature-list:HAVE_VRF}?
| +-ro allow-as-number?               uint32
| +-ro capability-graceful-restart?    empty
| +-ro unsuppress-route-map-name?     string
| +-ro additional-paths-mode?         ipi-bgp-types:bgp_peer_additional_path_type_t {feature-
list:HAVE_BGP_ADD_PATH}?
| +-ro additional-path-select-all?    empty {feature-list:HAVE_BGP_ADD_PATH}?
| +-ro additional-paths-best-select-count? uint8 {feature-list:HAVE_BGP_ADD_PATH}?
| +-ro site-origin-identifier?         string {feature-list:HAVE_VRF}?
| +-ro peer-group-range               ipi-bgp-types:bgp_peer_group_type_t
| +-ro group-limit?                   uint8
| +-ro peer-group-tag?                string
| +-ro peer-as?                       uint32
| +-ro source-identifier?              string
| +-ro bgp-version?                   uint8
| +-ro peer-connection-interval?       uint32
| +-ro enforce-multihop?               empty
| +-ro peer-shutdown?                 empty
| +-ro peer-shutdown-description?      cml-data-types:cml_line_t
| +-ro neighbor-passive?               empty
| +-ro disable-capability-negotiation? empty
| +-ro connection-retry-interval?      int32
| +-ro enable-dynamic-capability?      empty
| +-ro min-route-advertisement-interval? uint32
| +-ro peer-as-origin-interval?        uint32
| +-ro neighbor-as-override?          empty
| +-ro peer-description?               cml-data-types:cml_line_t
| +-ro peer-restart-time?              uint32 {feature-list:HAVE_RESTART,feature-list:HAVE_VRF}?
| +-ro graceful-shut?                 empty

```

---

---

```

| +--ro graceful-shut-timer?          uint32
| +--ro enable-peer-bfd?              empty {feature-list:HAVE_BFD}?
| +--ro enable-peer-bfd-multihop?     empty {feature-list:HAVE_BFD}?
| +--ro enable-ext-opt-param-len?     empty
| +--ro tcp-adjust-mss?               uint16
+--rw optional-as-lists
| +--rw optional-as-list* [optional-as]
|   +--rw optional-as  -> ../config/optional-as
|   +--rw config
|     | +--rw optional-as?  uint32
|     +--ro state
|       +--ro optional-as?  uint32
+--rw bgp-passwords
| +--rw bgp-password* [password]
|   +--rw password  -> ../config/password
|   +--rw config
|     | +--rw password?      ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
|     | +--rw auth-key-encrypt ipi-bgp-types:bgp_md5_t
|     +--ro state
|       +--ro password?      ipi-bgp-types:bgp_md5_password_t {feature-list:HAVE_TCP_MD5SIG}?
|       +--ro auth-key-encrypt ipi-bgp-types:bgp_md5_t
+--rw timers
| +--rw config!
| | +--rw keep-alive  uint16
| | +--rw hold-time   uint16
| +--ro state
|   +--ro keep-alive  uint16
|   +--ro hold-time   uint16
+--rw local-as
| +--rw local-as-list* [peer-local-as]
|   +--rw peer-local-as  -> ../config/peer-local-as
|   +--rw config
|     | +--rw peer-local-as?    uint32
|     | +--rw no-prepend-local-as? empty
|     | +--rw replace-local-as? empty
|     +--ro state

```

---

---

```

|   +--ro peer-local-as?      uint32
|   +--ro no-prepend-local-as? empty
|   +--ro replace-local-as?   empty
+--rw ebgp-multihop
| +--rw config!
| | +--rw maximum-hop-count?  uint8
| | +--rw enabled             empty
| +--ro state
|   +--ro maximum-hop-count?  uint8
|   +--ro enabled             empty
+--rw maximum-prefixes
| +--rw maximum-prefix* [prefix-count]
|   +--rw prefix-count  -> ../config/prefix-count
|   +--rw config
|   | +--rw prefix-count?      uint32
|   | +--rw stop-update?      empty
|   | +--rw maximum-prefix-warning? empty
|   | +--rw threshold-percentage? uint8
|   | +--rw warning-only?      empty
|   +--ro state
|     +--ro prefix-count?      uint32
|     +--ro stop-update?      empty
|     +--ro maximum-prefix-warning? empty
|     +--ro threshold-percentage? uint8
|     +--ro warning-only?      empty
+--rw distribute-list-filters
| +--rw distribute-list-filter* [filter-direction]
|   +--rw filter-direction  -> ../config/filter-direction
|   +--rw config
|   | +--rw access-list-identifier  string
|   | +--rw filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
|   +--ro state
|     +--ro access-list-identifier  string
|     +--ro filter-direction?      ipi-bgp-types:bgp_distribute_list_direction_t
+--rw as-list-filters
| +--rw as-list-filter* [as-list-direction]

```

---

```

|   +--rw as-list-direction   -> ../config/as-list-direction
|   +--rw config
|   |   +--rw as-access-list-identifier  string
|   |   +--rw as-list-direction?        ipi-bgp-types:bgp_distribute_list_direction_t
|   +--ro state
|       +--ro as-access-list-identifier  string
|       +--ro as-list-direction?        ipi-bgp-types:bgp_distribute_list_direction_t
+--rw prefix-list-filters
| +--rw prefix-list-filter* [prefix-filter-direction]
|   +--rw prefix-filter-direction -> ../config/prefix-filter-direction
|   +--rw config
|   |   +--rw prefix-list-name          string
|   |   +--rw prefix-filter-direction?  ipi-bgp-types:bgp_distribute_list_direction_t
|   +--ro state
|       +--ro prefix-list-name          string
|       +--ro prefix-filter-direction?  ipi-bgp-types:bgp_distribute_list_direction_t
+--rw route-map-filters
    +--rw route-map-filter* [route-map-direction]
        +--rw route-map-direction -> ../config/route-map-direction
        +--rw config
        |   +--rw route-map-name          string
        |   +--rw route-map-direction?  ipi-bgp-types:bgp_distribute_list_direction_t
        +--ro state
            +--ro route-map-name          string
            +--ro route-map-direction?  ipi-bgp-types:bgp_distribute_list_direction_t

```

rpcs:

```

+---x clear-ip-bgp-peer {feature-list:HAVE_BGPD}?
| +---w input
|   +---w arg          ipi-bgp-types:bgp_hostname_t
|   +---w peer-reset-description?  cml-data-types:cml_line_t
+---x clear-peer-group-l2vpn-evpn-soft-all {feature-list:HAVE_BGP_EVPN}?
| +---w input
|   +---w peer-group-tag  string
|   +---w soft-reconfig   ipi-bgp-types:bgp_update_clear_t
+---x clear-ip-bgp-all-peer {feature-list:HAVE_BGPD}?

```

```

| +---w input
|   +---w peer-reset-description?  cml-data-types:cml_line_t
+---x clear-bgp-l2vpn-evpn-soft-all {feature-list:HAVE_BGP_EVPN}?
| +---w input
|   +---w soft-reconfig  ipi-bgp-types:bgp_update_clear_t
+---x clear-bgp-remote-as-l2vpn-evpn-soft-all {feature-list:HAVE_BGP_EVPN}?
| +---w input
|   +---w peer-as          uint32
|   +---w soft-reconfig  ipi-bgp-types:bgp_update_clear_t
+---x clear-bgp-peer-address-l2vpn-evpn-soft {feature-list:HAVE_BGP_EVPN}?
| +---w input
|   +---w peer-address    ipi-bgp-types:bgp_ip_addr_t
|   +---w soft-reconfig  ipi-bgp-types:bgp_update_clear_t
+---x clear-ip-bgp-all-vrf {feature-list:HAVE_BGPD}?
| +---w input
|   +---w vrf-name        string
|   +---w peer-reset-description?  cml-data-types:cml_line_t
+---x clear-ip-bgp-vrf-peer {feature-list:HAVE_BGPD}?
| +---w input
|   +---w vrf-name        string
|   +---w address         ipi-bgp-types:bgp_hostname_t
|   +---w peer-reset-description?  cml-data-types:cml_line_t
+---x bgp-graceful-restart {feature-list:HAVE_RESTART}?
+---x clear-bgp-statistics {feature-list:HAVE_BGPD}?
+---x bgp-snmp-restart {feature-list:HAVE_BGPD}?
+---x bgp-debug-on {feature-list:HAVE_BGPD}?
| +---w input
|   +---w terminal-debug-options  ipi-bgp-types:bgp_debug_t
+---x bgp-debug-off {feature-list:HAVE_BGPD}?
| +---w input
|   +---w terminal-debug-options  ipi-bgp-types:bgp_debug_t
+---x bgp-all-debug-off {feature-list:HAVE_BGPD}?

```

notifications:

```

+---n bgp-established-notification
| +--ro severity?    cml-data-types:cml_notif_severity_t

```

```

| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro peer-address? ipi-bgp-types:bgp_ip_addr_t
| +--ro bgp-as?       uint32
| +--ro peer-state?   ipi-bgp-types:bgp_peer_status_t
+---n bgp-backward-transition-notification
    +--ro severity?    cml-data-types:cml_notif_severity_t
    +--ro eventClass?  cml-data-types:cml_notif_class_t
    +--ro peer-address? ipi-bgp-types:bgp_ip_addr_t
    +--ro bgp-as?      uint32
    +--ro peer-state?  ipi-bgp-types:bgp_peer_status_t

```

---

## module: ipi-bridge

```

+--rw global-bridge-vlan-check
+--rw global
+--rw config
| +--rw enable?  empty
+--ro state
+--ro enable?  empty

```

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance:

```

+--rw bridge
+--rw config!
| +--rw protocol          ipi-bridge-types:bridge_protocol_t
| +--rw disable-dynamic-learning?  empty
| +--rw l2-protocol-destination-mac? cml-data-types:cml_mac_addr_t {feature-list:HAVE_PROVIDER_BRIDGE}?
+--ro state
| +--ro protocol          ipi-bridge-types:bridge_protocol_t
| +--ro disable-dynamic-learning?  empty
| +--ro l2-protocol-destination-mac? cml-data-types:cml_mac_addr_t {feature-list:HAVE_PROVIDER_BRIDGE}?
+--rw bridge-ports
| +--rw interface* [name]
|   +--rw name      -> ../config/name
|   +--rw config
|     | +--rw name?          -> /ipi-interface:interfaces/interface/name

```



---

```

| | +--rw spanning-tree-protocol-status? ipi-bridge-types:bridge_spanningtree_enable_disable_t
| | +--ro state
| |   +--ro name? -> /ipi-interface:interfaces/interface/name
| |   +--ro spanning-tree-protocol-status? ipi-bridge-types:bridge_spanningtree_enable_disable_t
| |   +--ro switchport-mode? ipi-port-vlan-types:port_vlan_switch_port_mode_t
+--rw fdb
  +--rw interfaces
    | +--rw interface* [interface-name]
    | | +--rw interface-name -> ../config/interface-name
    | | +--rw config
    | | | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
    | | | +--rw disable-mac-learning empty
    | | +--ro state
    | |   +--ro interface-name? -> /ipi-interface:interfaces/interface/name
    | |   +--ro disable-mac-learning empty
  +--rw static-mac-table
    | +--rw entry* [mac-address]
    | | +--rw mac-address -> ../config/mac-address
    | | +--rw config
    | | | +--rw interface-name -> /ipi-interface:interfaces/interface/name
    | | | +--rw mac-address? cml-data-types:cml_mac_addr_t
    | | | +--rw action ipi-bridge-types:bridge_discardforward_t
    | | +--ro state
    | |   +--ro interface-name -> /ipi-interface:interfaces/interface/name
    | |   +--ro mac-address? cml-data-types:cml_mac_addr_t
    | |   +--ro action ipi-bridge-types:bridge_discardforward_t
  +--rw dynamic-mac-table
    +--ro entry* [mac-address vlan-id] {feature-list:HAVE_HAL}?
    | +--ro mac-address -> ../state/mac-address
    | +--ro vlan-id -> ../state/vlan-id
    | +--ro state {feature-list:HAVE_HAL}?
    | | +--ro mac-address? cml-data-types:cml_mac_addr_t
    | | +--ro vlan-id? uint16
    | | +--ro svlan-id? uint16 {feature-list:HAVE_PROVIDER_BRIDGE}?
    | | +--ro interface-name? -> /ipi-interface:interfaces/interface/name
    | | +--ro action? ipi-bridge-types:bridge_discardforward_t

```

---

---

+--ro entry-time-out? uint32

rpcs:

```
+---x bridge-clear-provider-edge-mac-address-table {feature-list:HAVE_L2}?
| +---w input
|   +---w mac-type    ipi-bridge-types:bridge_mac_type_t
|   +---w cvlan-id    uint16
|   +---w svlan-id    uint16
|   +---w bridge-id   string
+---x bridge-clear-mac-address-table {feature-list:HAVE_L2}?
| +---w input
|   +---w mac-type      ipi-bridge-types:bridge_mac_type_t
|   +---w bridge-id     string
|   +---w interface-name? string
|   +---w mac-address?  cml-data-types:cml_mac_addr_t
|   +---w vlan-id?     uint16
+---x bridge-clear-provider-edge-dynamic-mac-address-table {feature-list:HAVE_L2}?
| +---w input
|   +---w cvlan-id    uint16
|   +---w svlan-id    uint16
|   +---w bridge-id   string
+---x bridge-clear-dynamic-mac-address-table {feature-list:HAVE_L2}?
| +---w input
|   +---w bridge-id     string
|   +---w mac-address?  cml-data-types:cml_mac_addr_t
|   +---w interface-name? string
|   +---w vlan-id?     uint16
+---x bridge-clear-allowed-ethertype-stats {feature-list:HAVE_ALLOWED_ETHERTYPE}?
| +---w input
|   +---w interface-name? string
+---x bridge-clear-mstp-port-dynamic-mac-address-table {feature-list:HAVE_L2}?
  +---w input
    +---w interface-name  string
    +---w instance-id     uint32
    +---w bridge-id       string
```

---

## module: ipi-cfm

```
+--rw cfm {feature-list:HAVE_CFM}?
  +--rw global
    | +--ro loopback
    | | +--ro state
    | |   +--ro counters
    | |     +--ro messages-transmitted?      yang:zero-based-counter32
    | |     +--ro replies-received?          yang:zero-based-counter32
    | |     +--ro out-of-order-replies-received? yang:zero-based-counter32
    | |     +--ro bad-msdu?                  yang:zero-based-counter32
    | +--rw linktrace
    |   +--rw cache
    |     | +--rw config!
    |     | | +--rw cache-enable  empty
    |     | | +--rw cache-size?  uint16
    |     | +--ro state
    |     |   +--ro cache-enable  empty
    |     |   +--ro cache-size?  uint16
    |     +--ro state
    |       +--ro counters
    |         +--ro messages-transmitted?      yang:zero-based-counter32
    |         +--ro replies-transmitted?       yang:zero-based-counter32
    |         +--ro valid-replies-received?    yang:zero-based-counter32
    |         +--ro unexpected-replies-received? yang:zero-based-counter32
  +--rw debug
    | +--rw config
    | | +--rw options? ipi-cfm-data-types:cfm_debug_t
    | +--ro state
    |   +--ro options?      ipi-cfm-data-types:cfm_debug_t
    |   +--ro terminal-debug-status? ipi-cfm-data-types:cfm_debug_t
  +--rw maintenance-domains
    +--rw maintenance-domain* [md-name]
```

---

```

+--rw md-name          -> ../config/md-name
+--rw config
| +--rw md-name?      string
| +--rw type          ipi-cfm-data-types:cfm_md_type_t
| +--rw level         uint8
| +--rw mip-creation? ipi-cfm-data-types:cfm_mip_creation_mode_t {feature-list:HAVE_PROVIDER_BRIDGE}?
+--ro state
| +--ro md-name?      string
| +--ro type          ipi-cfm-data-types:cfm_md_type_t
| +--ro level         uint8
| +--ro mip-creation? ipi-cfm-data-types:cfm_mip_creation_mode_t {feature-list:HAVE_PROVIDER_BRIDGE}?
+--rw maintenance-associations
+--rw maintenance-association* [ma-name]
+--rw ma-name          -> ../config/ma-name
+--rw config
| +--rw ma-name?      string
| +--rw type          ipi-cfm-data-types:cfm_ma_type_t
| +--rw ccm-interval? ipi-cfm-data-types:cfm_msg_interval_t
| +--rw static-rmep-identifiers* uint16
| +--rw mip-creation? ipi-cfm-data-types:cfm_ma_mip_creation_mode_t
| +--rw vlan-id?      uint16
| +--rw inner-vlan-id? uint16
| +--rw bridge-id?    -> /ipi-network-instance:network-instances/network-instance/instance-name
| +--rw link-level-ma? empty
| +--rw mip-interface-name* -> /ipi-interface:interfaces/interface/name {feature-
list:HAVE_PROVIDER_BRIDGE}?
| +--rw evpn-id?          uint32 {feature-list:HAVE_BGP_EVPN,feature-
list:NOT_HAVE_CUSTOM1_MPLS_OR_HAVE_NVO3_OAM}?
+--ro state
| +--ro ma-name?      string
| +--ro type          ipi-cfm-data-types:cfm_ma_type_t
| +--ro ccm-interval? ipi-cfm-data-types:cfm_msg_interval_t
| +--ro static-rmep-identifiers* uint16
| +--ro mip-creation? ipi-cfm-data-types:cfm_ma_mip_creation_mode_t
| +--ro vlan-id?      uint16
| +--ro inner-vlan-id? uint16
| +--ro bridge-id?    -> /ipi-network-instance:network-instances/network-instance/instance-name

```

---

---

```

    | +--ro link-level-ma?          empty
    | +--ro mip-interface-name*     -> /ipi-interface:interfaces/interface/name {feature-
list:HAVE_PROVIDER_BRIDGE}?
    | +--ro evpn-id?               uint32 {feature-list:HAVE_BGP_EVPN,feature-
list:NOT_HAVE_CUSTOM1_MPLS_OR_HAVE_NVO3_OAM}?
    +--rw maintenance-end-points
    | +--rw maintenance-end-point* [mep-id]
    |   +--rw mep-id                -> ../config/mep-id
    |   +--rw config
    |     | +--rw mep-id?           uint16
    |     | +--rw direction         ipi-cfm-data-types:cfm_mep_direction_t
    |     | +--rw administrative-state ipi-cfm-data-types:cfm_mep_state_t
    |     | +--rw mep-outer-vlan?   uint16
    |     | +--rw mep-inner-vlan?   uint16
    |     | +--rw bw-mapped-interface? -> /ipi-interface:interfaces/interface/name
    |     | +--rw interface-name?   -> /ipi-interface:interfaces/interface/name
    |     | +--rw remote-vpws-vc-name? string
    |     | +--rw remote-evpn-id?   uint32
    |     +--ro state
    |       | +--ro mep-id?         uint16
    |       | +--ro direction       ipi-cfm-data-types:cfm_mep_direction_t
    |       | +--ro administrative-state ipi-cfm-data-types:cfm_mep_state_t
    |       | +--ro mep-outer-vlan? uint16
    |       | +--ro mep-inner-vlan? uint16
    |       | +--ro interface-name? -> /ipi-interface:interfaces/interface/name
    |       | +--ro remote-vpws-vc-name? string
    |       | +--ro remote-evpn-id? uint32
    |       | +--ro mac-address?    cml-data-types:cml_mac_addr_t
    |       | +--ro ma-status?      ipi-cfm-data-types:cfm_ma_status_t
    |       | +--ro mep-connectivity-status? ipi-cfm-data-types:cfm_mep_connectivity_status_t
    |       | +--ro bw-mapped-interface? -> /ipi-interface:interfaces/interface/name
    |       +--rw continuity-check
    |         | +--rw config
    |           | | +--rw enable-cc-multicast?      empty
    |           | | +--rw lowest-fault-priority-defect? ipi-cfm-data-types:cfm_mep_lowest_fault_priority_t
    |           | +--ro state
    |           | | +--ro enable-cc-multicast?      empty

```

---

---

```

| | | +--ro lowest-fault-priority-defect? ipi-cfm-data-types:cfm_mep_lowest_fault_priority_t
| | | +--ro highest-priority-defect-found? ipi-cfm-data-types:cfm_mep_highest_fault_defect_t
| | | +--ro cc-received-defect? ipi-cfm-data-types:cfm_received_ccm_defect_t
| | | +--ro cc-messages-received? yang:zero-based-counter32
| | | +--ro cc-messages-sent? yang:zero-based-counter32
| | +--ro remote-mep-database
| |   +--ro remote-mep* [rmep-id]
| |     +--ro rmep-id -> ../state/rmep-id
| |     +--ro state
| |       +--ro rmep-id? uint16
| |       +--ro mac-address? cml-data-types:cml_mac_addr_t
| |       +--ro rdi? empty
| +--ro loopback
| | +--ro last-test-result
| |   +--ro state
| |     +--ro target-mac-address? ipi-cfm-data-types:cfm_rmep_mac_addr_t
| |     +--ro messages-transmitted? yang:zero-based-counter32
| |     +--ro replies-received? yang:zero-based-counter32
| +--ro linktrace-database
| | +--ro linktrace-entry* [transaction-id]
| |   +--ro transaction-id -> ../state/transaction-id
| |   +--ro state
| |     | +--ro transaction-id? uint32
| |     | +--ro target-mac-address? ipi-cfm-data-types:cfm_rmep_mac_addr_t
| |     +--ro replies
| |       +--ro reply* [index]
| |         +--ro index -> ../state/index
| |         +--ro state
| |           +--ro index? uint8
| |           +--ro hops? uint8
| |           +--ro destination-mac-address? ipi-cfm-data-types:cfm_rmep_mac_addr_t
| |           +--ro relay-action? ipi-cfm-data-types:cfm_relay_action_t
| +--rw ethernet-alarm-indication-signal {feature-list:HAVE_CFM_Y1731}?
| | +--rw config!
| |   | +--rw enable-status empty
| |   | +--rw client-md-level uint8

```

---

```

| | | +--rw interval?      ipi-cfm-data-types:cfm_y1731_tx_interval_t
| | | +--ro state
| | |   +--ro enable-status      empty
| | |   +--ro client-md-level    uint8
| | |   +--ro interval?         ipi-cfm-data-types:cfm_y1731_tx_interval_t
| | |   +--ro is-ais-frame-received? boolean
| | +--rw y1731-responders {feature-list:HAVE_CFM_Y1731}?
| |   +--rw config
| |   +--ro state
+--ro default-mips
  +--ro default-mip* [interface-name]
    +--ro interface-name  -> ../state/interface-name
    +--ro state
      +--ro interface-name? string
      +--ro vlan-id?      uint16
      +--ro mac-address?  cml-data-types:cml_mac_addr_t

```

rpcs:

```

+---x cfm-l2-clear-ethernet-remote-meps {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?
| +---w input
|   +---w domain-name  string
+---x cfm-clear-all-mep-stats {feature-list:HAVE_CFM}?
+---x cfm-l2-clear-mep-stats {feature-list:HAVE_CFM}?
| +---w input
|   +---w domain-name  string
|   +---w mep-id      uint16
|   +---w ma-name     string
+---x cfm-snmp-restart {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?
+---x cfm-terminal-debug-on {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?
| +---w input
|   +---w terminal-debug-options  ipi-cfm-data-types:cfm_debug_t
+---x cfm-terminal-debug-off {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?
| +---w input
|   +---w terminal-debug-options  ipi-cfm-data-types:cfm_debug_t
+---x cfm-l2-test-loopback {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?
| +---w input

```

---

```

| +---w md-name      string
| +---w ma-name      string
| +---w mep-id       uint16
| +---w mac-address  ipi-cfm-data-types:cfm_lb_mac_addr_t
+---x cfm-l2-test-linktrace {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?
| +---w input
| | +---w md-name      string
| | +---w ma-name      string
| | +---w mep-id       uint16
| | +---w mac-address  ipi-cfm-data-types:cfm_lb_mac_addr_t
| +--ro output
| +--ro transaction-id uint32
+---x cfm-l2-clear-linktrace-cache {feature-list:HAVE_CFM,feature-list:HAVE_ONMD}?

```

notifications:

```

+---n cfm-l2-mep-ccm-highest-fault-info {feature-list:HAVE_CFM}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro mep-id?        uint16
| +--ro ma-name?       string
| +--ro md-name?       string
| +--ro highest-priority-defect-found? ipi-cfm-data-types:cfm_mep_highest_fault_defect_t
+---n cfm-l2-ethernet-loopback-test-completed {feature-list:HAVE_CFM}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro mep-id?        uint16
| +--ro ma-name?       string
| +--ro md-name?       string
| +--ro target-mac-address? ipi-cfm-data-types:cfm_rmep_mac_addr_t
+---n cfm-l2-ethernet-linktrace-test-completed {feature-list:HAVE_CFM}?
  +--ro severity?      cml-data-types:cml_notif_severity_t
  +--ro eventClass?    cml-data-types:cml_notif_class_t
  +--ro transaction-id? uint32
  +--ro mep-id?        uint16
  +--ro ma-name?       string
  +--ro md-name?       string

```



---

+--ro target-mac-address? ipi-cfm-data-types:cfm\_rmep\_mac\_addr\_t

---

## module: ipi-crypto

rpcs:

+---x crypto-rsa-key-gen {feature-list:HAVE\_HOSTPD}?  
+---w input  
+---w ipv4-addr inet:ipv4-address

---

## module: ipi-customstats

notifications:

+---n platform-cpu-queue-full  
| +--ro severity? cml-data-types:cml\_notif\_severity\_t  
| +--ro eventClass? cml-data-types:cml\_notif\_class\_t  
| +--ro queue-id? uint8  
| +--ro queue-name? string  
| +--ro rate-percent? int8  
| +--ro tx-pkt-rate? yang:counter32  
| +--ro last-increment-count? yang:counter64  
| +--ro last-increment-time? yang:date-and-time  
+---n platform-cpu-queue-high  
| +--ro severity? cml-data-types:cml\_notif\_severity\_t  
| +--ro eventClass? cml-data-types:cml\_notif\_class\_t  
| +--ro queue-id? uint8  
| +--ro queue-name? string  
| +--ro rate-percent? int8  
| +--ro tx-pkt-rate? yang:counter32  
+---n platform-cpu-queue-recovery  
| +--ro severity? cml-data-types:cml\_notif\_severity\_t  
| +--ro eventClass? cml-data-types:cml\_notif\_class\_t  
| +--ro queue-id? uint8

---

```
| +--ro queue-name?   string
| +--ro rate-percent? int8
+---n platform-cpu-crc-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro bad-crc?     yang:counter64
+---n platform-cpu-undersize-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro undersize-pkts? yang:counter64
+---n platform-cpu-oversize-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro mtu-exceed?  yang:counter64
+---n platform-cpu-fragment-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro fragments-pkts? yang:counter64
+---n platform-cpu-jabber-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro jabber-pkts? yang:counter64
+---n platform-interface-crc-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
| +--ro bad-crc?     yang:counter64
+---n platform-interface-undersize-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
| +--ro undersize-pkts? yang:counter64
+---n platform-interface-oversize-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
```

```

| +--ro mtu-exceed? yang:counter64
+---n platform-interface-fragment-error-packets
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
| +--ro fragments-pkts? yang:counter64
+---n platform-interface-jabber-error-packets
  +--ro severity?    cml-data-types:cml_notif_severity_t
  +--ro eventClass?  cml-data-types:cml_notif_class_t
  +--ro name?        string
  +--ro jabber-pkts? yang:counter64

```

---

## module: ipi-dcb

```

+--rw dcb {feature-list:HAVE_DCB}?
  +--rw bridges
    | +--rw bridge* [bridge-id]
    |   +--rw bridge-id  -> ../config/bridge-id
    |   +--rw config
    |     | +--rw bridge-id?          -> /ipi-network-instance:network-instances/network-instance/instance-name
    |     | +--rw dcb-enabled          boolean
    |     | +--rw enable-ets?          empty
    |     | +--rw enable-pfc?          empty
    |     | +--rw enable-application-priority? empty
    |     +--ro state
    |       | +--ro bridge-id?          -> /ipi-network-instance:network-instances/network-instance/instance-name
    |       | +--ro dcb-enabled          boolean
    |       | +--ro enable-ets?          empty
    |       | +--ro enable-pfc?          empty
    |       | +--ro enable-application-priority? empty
    |       +--rw qcn
    |         +--rw config!
    |           | +--rw enabled          empty

```

---

```

|   | +--rw cnm-transmit-priority? uint8
|   | +--rw cnpv-priorities*      uint8
|   +--ro state
|   | +--ro enabled                empty
|   | +--ro cnm-transmit-priority? uint8
|   | +--ro cnpv-priorities*      uint8
|   +--rw cnpv-defenses
|       +--rw cnpv-defense* [priority-value]
|           +--rw priority-value  -> ../config/priority-value
|           +--rw config
|               | +--rw priority-value?  -> /dcb/bridges/bridge/qcn/config/cnpv-priorities
|               | +--rw qcn-mode          ipi-dcb-types:dcb_qcn_mode_t
|               | +--rw admin-defense-mode? ipi-dcb-types:dcb_qcn_admin_defense_mode_t
|               | +--rw alternate-priority? uint8
|               +--ro state
|                   +--ro priority-value?  -> /dcb/bridges/bridge/qcn/config/cnpv-priorities
|                   +--ro qcn-mode          ipi-dcb-types:dcb_qcn_mode_t
|                   +--ro admin-defense-mode? ipi-dcb-types:dcb_qcn_admin_defense_mode_t
|                   +--ro alternate-priority? uint8
+--rw debug
| +--rw config
| | +--rw enable? empty
| +--ro state
| +--ro enable? empty
+--rw interfaces
+--rw interface* [name] {feature-list:HAVE_DCB}?
+--rw name          -> ../config/name
+--rw config
| +--rw name?      -> /ipi-interface:interfaces/interface/name
| +--rw pfc-mode?  ipi-dcb-types:dcb_pfc_mode_t
| +--rw ets-mode?  ipi-dcb-types:dcb_ets_mode_t
+--ro state
| +--ro name?      -> /ipi-interface:interfaces/interface/name
| +--ro pfc-mode?  ipi-dcb-types:dcb_pfc_mode_t
| +--ro ets-mode?  ipi-dcb-types:dcb_ets_mode_t
+--rw qcn

```

---

---

```
| +--rw cnpv-defenses
| | +--rw cnpv-defense* [priority-value]
| |   +--rw priority-value  -> ../config/priority-value
| |   +--rw config
| |     | +--rw priority-value?  -> /dcb/bridges/bridge/qcn/config/cnpv-priorities
| |     | +--rw qcn-mode          ipi-dcb-types:dcb_qcn_mode_t
| |     | +--rw admin-defense-mode? ipi-dcb-types:dcb_qcn_admin_defense_mode_t
| |     | +--rw alternate-priority? uint8
| |     +--ro state
| |       +--ro priority-value?  -> /dcb/bridges/bridge/qcn/config/cnpv-priorities
| |       +--ro qcn-mode          ipi-dcb-types:dcb_qcn_mode_t
| |       +--ro admin-defense-mode? ipi-dcb-types:dcb_qcn_admin_defense_mode_t
| |       +--ro alternate-priority? uint8
| +--rw congestion-points
|   +--rw congestion-point* [cnpv-value]
|     +--rw cnpv-value  -> ../config/cnpv-value
|     +--rw config
|       | +--rw cnpv-value?  -> /dcb/bridges/bridge/qcn/config/cnpv-priorities
|       | +--rw sample-base? uint32
|       | +--rw weight?      int8
|       +--ro state
|         +--ro cnpv-value?  -> /dcb/bridges/bridge/qcn/config/cnpv-priorities
|         +--ro sample-base? uint32
|         +--ro weight?      int8
+--rw priority-flow-control
| +--rw config
| | +--rw accept-peer-config?  empty
| | +--rw advertise-local-config? empty
| | +--rw enabled-priorities*  uint8
| | +--rw cap?                 uint8
| | +--rw link-delay-allowance? uint32
| +--ro state
|   +--ro accept-peer-config?  empty
|   +--ro advertise-local-config? empty
|   +--ro enabled-priorities*  uint8
|   +--ro cap?                 uint8
```

---

---

```

|   +--ro link-delay-allowance?   uint32
+--rw enhanced-transmission-selection
| +--rw config
| | +--rw advertise-local-config?   empty
| | +--rw accept-peer-config?      empty
| | +--rw max-traffic-class-groups? uint8
| +--ro state
| | +--ro advertise-local-config?   empty
| | +--ro accept-peer-config?      empty
| | +--ro max-traffic-class-groups? uint8
| +--rw traffic-class-groups
|   +--rw traffic-class-group* [group-index]
|     +--rw group-index   -> ../config/group-index
|     +--rw config
|       | +--rw group-index?      uint8
|       | +--rw mapped-priorities* uint8
|       | +--rw bandwidth-percentage? uint8
|       +--ro state
|         +--ro group-index?      uint8
|         +--ro mapped-priorities* uint8
|         +--ro bandwidth-percentage? uint8
+--rw application-priority
  +--rw config
  | +--rw enabled?          empty
  | +--rw advertise-local-config? empty
  +--ro state
  | +--ro enabled?          empty
  | +--ro advertise-local-config? empty
  +--rw port-mappings
  | +--rw port-mapping* [protocol-type port-number priority-value]
  |   +--rw protocol-type   -> ../config/protocol-type
  |   +--rw port-number     -> ../config/port-number
  |   +--rw priority-value  -> ../config/priority-value
  |   +--rw config
  |     | +--rw protocol-type?   ipi-dcb-types:dcb_app_prio_protocol_t
  |     | +--rw port-number?    uint16

```

---

```
| | +--rw priority-value? uint8
| +--ro state
|   +--ro protocol-type? ipi-dcb-types:dcb_app_prio_protocol_t
|   +--ro port-number?   uint16
|   +--ro priority-value? uint8
+--rw service-mappings
| +--rw service-mapping* [protocol-type service-name priority-value]
| +--rw protocol-type   -> ../config/protocol-type
| +--rw service-name     -> ../config/service-name
| +--rw priority-value   -> ../config/priority-value
| +--rw config
| | +--rw protocol-type? ipi-dcb-types:dcb_app_prio_protocol_t
| | +--rw service-name?  string
| | +--rw priority-value? uint8
| +--ro state
|   +--ro protocol-type? ipi-dcb-types:dcb_app_prio_protocol_t
|   +--ro service-name?  string
|   +--ro priority-value? uint8
+--rw ethernet-name-mappings
| +--rw ethernet-name-mapping* [ether-name priority-value]
| +--rw ether-name     -> ../config/ether-name
| +--rw priority-value -> ../config/priority-value
| +--rw config
| | +--rw ether-name?   ipi-dcb-types:dcb_app_ether_name_t
| | +--rw priority-value? uint8
| +--ro state
|   +--ro ether-name?   ipi-dcb-types:dcb_app_ether_name_t
|   +--ro priority-value? uint8
+--rw ethernet-value-mappings
  +--rw ethernet-value-mapping* [ether-value priority-value]
    +--rw ether-value   -> ../config/ether-value
    +--rw priority-value -> ../config/priority-value
    +--rw config
    | +--rw ether-value? ipi-dcb-types:dcb_app_ether_value_t
    | +--rw priority-value? uint8
    +--ro state
```

```
+--ro ether-value?   ipi-dcb-types:dcb_app_ether_value_t
+--ro priority-value? uint8
```

---

## module: ipi-dhcp

```
+--rw dhcp
| +--rw global
| | +--rw config
| | +--rw disable-dhcp-feature? empty
| | +--ro state
| | +--ro disable-dhcp-feature? empty
+--rw relay
| +--rw global
| | +--rw config
| | | +--rw disable-dhcpv4-relay? empty
| | | +--rw disable-dhcpv6-relay? empty
| | +--ro state
| | +--ro disable-dhcpv4-relay? empty
| | +--ro disable-dhcpv6-relay? empty
| +--rw interfaces
| | +--rw interface* [name]
| | | +--rw name -> ../config/name
| | | +--rw config
| | | | +--rw name? -> /ipi-interface:interfaces/interface/name
| | | | +--rw ipv4-relay-interface? empty
| | | | +--rw ipv4-uplink-interface? empty
| | | | +--rw ipv4-group-name? string
| | | | +--rw ipv6-relay-interface? empty {feature-list:HAVE_IPV6}?
| | | | +--rw ipv6-uplink-interface? empty {feature-list:HAVE_IPV6}?
```



---

```

| | | +--rw ipv6-group-name?      string
| | +--ro state
| |   +--ro name?                  -> /ipi-interface:interfaces/interface/name
| |   +--ro ipv4-relay-interface?  empty
| |   +--ro ipv4-uplink-interface? empty
| |   +--ro ipv4-group-name?      string
| |   +--ro ipv6-relay-interface? empty {feature-list:HAVE_IPV6}?
| |   +--ro ipv6-uplink-interface? empty {feature-list:HAVE_IPV6}?
| |   +--ro ipv6-group-name?      string
| +--rw vrfs
|   +--rw vrf* [vrf-name]
|     +--rw vrf-name              -> ../config/vrf-name
|     +--rw config
|       +--rw vrf-name?           -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/
vrf-name
|       +--rw link-selection-source-ip?      inet:ipv4-address
|       +--rw enable-option82?               empty
|       +--rw enable-option82-always-on?     empty
|       +--rw enable-dhcpv6-pd-route-injection? empty {feature-list:HAVE_IPV6}?
|       +--rw enable-dhcpv6-duplicate-clients? empty {feature-list:HAVE_IPV6}?
|       +--rw remote-id?                     ipi-dhcp-relay-types:dhcp_remote_id_t
|       +--rw subscriber-id?                 string
|       +--ro state
|       +--rw vrf-name?                     -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/
vrf-name
|       +--ro link-selection-source-ip?      inet:ipv4-address
|       +--ro enable-option82?               empty
|       +--ro enable-option82-always-on?     empty
|       +--ro enable-dhcpv6-pd-route-injection? empty {feature-list:HAVE_IPV6}?
|       +--ro enable-dhcpv6-duplicate-clients? empty {feature-list:HAVE_IPV6}?
|       +--ro remote-id?                     ipi-dhcp-relay-types:dhcp_remote_id_t
|       +--ro subscriber-id?                 string
|       +--ro bogus-giaddr-drops?            uint32
|       +--ro client-packets-relayed?        uint32
|       +--ro server-packet-errors?          uint32
|       +--ro server-packets-relayed?        uint32
|       +--ro client-packet-errors?          uint32

```

---

---

```

|   | +--ro agent-option-errors?      uint32
|   | +--ro corrupt-agent-options?    uint32
|   | +--ro missing-agent-option?     uint32
|   | +--ro bad-circuit-id?           uint32
|   | +--ro missing-circuit-id?       uint32
|   | +--ro circuit-id?               string
|   +--rw ipv4-vpn-links
|   | +--rw ipv4-vpn-link* [interface-type]
|   |   +--rw interface-type -> ../config/interface-type
|   |   +--rw config
|   |     | +--rw interface-type?    ipi-dhcp-relay-types:dhcp_vpn_interface_type_t
|   |     | +--rw interface-direction ipi-dhcp-relay-types:dhcp_vpn_interface_direction_t
|   |     | +--ro state
|   |     |   +--ro interface-type?  ipi-dhcp-relay-types:dhcp_vpn_interface_type_t
|   |     |   +--ro interface-direction ipi-dhcp-relay-types:dhcp_vpn_interface_direction_t
|   +--rw ipv6-vpn-links
|   | +--rw ipv6-vpn-link* [interface-type-v6] {feature-list:HAVE_IPV6}?
|   |   +--rw interface-type-v6 -> ../config/interface-type-v6
|   |   +--rw config
|   |     | +--rw interface-type-v6?  ipi-dhcp-relay-types:dhcp_vpn_interface_type_t
|   |     | +--rw interface-direction-v6 ipi-dhcp-relay-types:dhcp_vpn_interface_direction_t
|   |     | +--ro state
|   |     |   +--ro interface-type-v6?  ipi-dhcp-relay-types:dhcp_vpn_interface_type_t
|   |     |   +--ro interface-direction-v6 ipi-dhcp-relay-types:dhcp_vpn_interface_direction_t
|   +--ro dhcpv6-delegated-prefixes* [interface-name] {feature-list:HAVE_IPV6}?
|   | +--ro interface-name -> ../state/interface-name
|   | +--ro state
|   |   +--ro interface-name?    string
|   |   +--ro next-hop?          inet:ipv6-address
|   |   +--ro prefix?            cml-data-types:cml_ipv6_prefix_t
|   |   +--ro preferred-lifetime? uint32
|   |   +--ro maximum-lifetime?  uint32
|   |   +--ro prefix-start-time? yang:date-and-time
|   |   +--ro prefix-expiry-time? yang:date-and-time
|   |   +--ro state?             ipi-dhcp-relay-types:dhcp6_pd_route_state_t
|   +--rw ipv4-dhcp-servers

```

---

```

|   | +--rw ipv4-dhcp-server* [ip-address]
|   |   +--rw ip-address -> ../config/ip-address
|   |   +--rw config
|   |     | +--rw ip-address?          inet:ipv4-address
|   |     | +--rw dhcpv4-server-global-vrf? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/
config/vrf-name
|   |     +--ro state
|   |       +--ro ip-address?          inet:ipv4-address
|   |       +--ro dhcpv4-server-global-vrf? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/
config/vrf-name
|   | +--rw ipv6-dhcp-servers {feature-list:HAVE_IPV6}?
|   |   +--rw ipv6-dhcp-server* [ipv6-address]
|   |   +--rw ipv6-address -> ../config/ipv6-address
|   |   +--rw config
|   |     | +--rw ipv6-address?          inet:ipv6-address {feature-list:HAVE_IPV6}?
|   |     | +--rw dhcpv6-server-global-vrf? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/
config/vrf-name
|   |     +--ro state
|   |       +--ro ipv6-address?          inet:ipv6-address {feature-list:HAVE_IPV6}?
|   |       +--ro dhcpv6-server-global-vrf? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/
config/vrf-name
|   | +--rw dhcp-groups
|   |   +--rw dhcp-group* [group-name]
|   |   +--rw group-name -> ../config/group-name
|   |   +--rw config
|   |     | +--rw group-name? string
|   |     | +--rw server*      inet:ipv4-address
|   |     +--ro state
|   |       +--ro group-name? string
|   |       +--ro server*      inet:ipv4-address
|   | +--rw dhcpv6-groups {feature-list:HAVE_IPV6}?
|   |   +--rw dhcpv6-group* [group6-name]
|   |   +--rw group6-name -> ../config/group6-name
|   |   +--rw config
|   |     | +--rw group6-name? string
|   |     | +--rw server*      inet:ipv6-address
|   |     +--ro state
|   |       +--ro group6-name? string

```

---

```

|           +--ro server*      inet:ipv6-address
+--rw client
| +--rw interfaces
|   +--rw interface* [name]
|     +--rw name                -> ../config/name
|     +--rw config
|       | +--rw name?            -> /ipi-interface:interfaces/interface/name
|       | +--rw request-ipv4-dns?    empty
|       | +--rw request-log-server?  empty {feature-list:HAVE_SYSLOG}?
|       | +--rw request-host-name?   empty
|       | +--rw request-ntp-server?  empty {feature-list:HAVE_HOSTP_NTP}?
|       | +--rw request-ipv6-dns?    empty {feature-list:HAVE_IPV6}?
|       | +--rw request-ipv6-domain-list?  empty {feature-list:HAVE_IPV6}?
|       | +--rw request-ipv6-ntp-server?  empty {feature-list:HAVE_IPV6}?
|       | +--rw request-ipv6-rapid-commit? empty {feature-list:HAVE_IPV6}?
|       | +--rw request-ipv6-vendor-opts? empty {feature-list:HAVE_IPV6}?
|       | +--rw ipv6-information-request? empty {feature-list:HAVE_IPV6}?
|       | +--rw ipv6-dad-wait-time?    uint16 {feature-list:HAVE_IPV6}?
|       | +--rw ipv6-client-duid-type?  cml-data-types:dhcp6_duid_type_t {feature-list:HAVE_IPV6}?
|       | +--rw ipv6-max-delegated-prefix? uint16 {feature-list:HAVE_IPV6}?
|       | +--rw request-ipv6-prefix?    string {feature-list:HAVE_IPV6}?
|     +--ro state
|       | +--ro name?              -> /ipi-interface:interfaces/interface/name
|       | +--ro request-ipv4-dns?    empty
|       | +--ro request-log-server?  empty {feature-list:HAVE_SYSLOG}?
|       | +--ro request-host-name?   empty
|       | +--ro request-ntp-server?  empty {feature-list:HAVE_HOSTP_NTP}?
|       | +--ro request-ipv6-dns?    empty {feature-list:HAVE_IPV6}?
|       | +--ro request-ipv6-domain-list?  empty {feature-list:HAVE_IPV6}?
|       | +--ro request-ipv6-ntp-server?  empty {feature-list:HAVE_IPV6}?
|       | +--ro request-ipv6-rapid-commit? empty {feature-list:HAVE_IPV6}?
|       | +--ro request-ipv6-vendor-opts? empty {feature-list:HAVE_IPV6}?
|       | +--ro ipv6-information-request? empty {feature-list:HAVE_IPV6}?
|       | +--ro ipv6-dad-wait-time?    uint16 {feature-list:HAVE_IPV6}?
|       | +--ro ipv6-client-duid-type?  cml-data-types:dhcp6_duid_type_t {feature-list:HAVE_IPV6}?
|       | +--ro ipv6-max-delegated-prefix? uint16 {feature-list:HAVE_IPV6}?

```

---

---

```

| | +--ro request-ipv6-prefix?      string {feature-list:HAVE_IPV6}?
| +--rw prefix-ipv6-addresses {feature-list:HAVE_IPV6}?
| | +--rw prefix-ipv6-address* [prefix-name suffix-ipv6-addr]
| |   +--rw prefix-name      -> ../config/prefix-name
| |   +--rw suffix-ipv6-addr -> ../config/suffix-ipv6-addr
| |   +--rw config
| |     | +--rw prefix-name?      string
| |     | +--rw suffix-ipv6-addr? string
| |     +--ro state
| |       +--ro prefix-name?      string
| |       +--ro suffix-ipv6-addr? string
| +--ro learned-prefixes* [learnt-prefix] {feature-list:HAVE_IPV6}?
|   +--ro learnt-prefix  cml-data-types:cml_ipv6_prefix_t
|   +--ro state
|     +--ro learnt-prefix?      cml-data-types:cml_ipv6_prefix_t
|     +--ro max-lifetime?       uint32
|     +--ro preferred-lifetime? uint32
+--rw server
| +--rw interfaces
| | +--rw interface* [name]
| |   +--rw name      -> ../config/name
| |   +--rw config
| |     | +--rw name?          -> /ipi-interface:interfaces/interface/name
| |     | +--rw enable-ipv4-server? empty
| |     | +--rw enable-ipv6-server? empty {feature-list:HAVE_IPV6}?
| |     +--ro state
| |       +--ro name?          -> /ipi-interface:interfaces/interface/name
| |       +--ro enable-ipv4-server? empty
| |       +--ro enable-ipv6-server? empty {feature-list:HAVE_IPV6}?
| +--rw vrfs
|   +--rw vrf* [vrf-name]
|     +--rw vrf-name      -> ../config/vrf-name
|     +--rw config
|       | +--rw max-lease-time?      int32
|       | +--rw default-lease-time?  int32
|       | +--rw rapid-commit?        empty

```

---

---

```

| | +--rw preference?      empty
| | +--rw vrf-name?        -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| | +--ro state
| | | +--ro max-lease-time?  int32
| | | +--ro default-lease-time? int32
| | | +--ro rapid-commit?    empty
| | | +--ro preference?      empty
| | +--ro vrf-name?        -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
| | +--rw dhcp-pools
| | | +--rw dhcp-pool* [pool-name]
| | | | +--rw pool-name -> ../config/pool-name
| | | | +--rw config
| | | | | +--rw pool-name?      string
| | | | | +--rw host-name?      string
| | | | | +--rw routers?       inet:ipv4-address
| | | | | +--rw ntp-server*     inet:ipv4-address
| | | | | +--rw boot-file?     string
| | | | | +--rw tftp-server?    inet:ipv4-address
| | | | | +--rw log-server*     inet:ipv4-address
| | | | | +--rw dns-server*     inet:ipv4-address
| | | | | +--rw network?       inet:ipv4-address
| | | | | +--rw netmask?       inet:ipv4-address
| | | | | +--rw low-address-in-range? inet:ipv4-address
| | | | | +--rw high-address-in-range? inet:ipv4-address
| | | +--ro state
| | | | +--ro pool-name?      string
| | | | +--ro host-name?      string
| | | | +--ro routers?       inet:ipv4-address
| | | | +--ro ntp-server*     inet:ipv4-address
| | | | +--ro boot-file?     string
| | | | +--ro tftp-server?    inet:ipv4-address
| | | | +--ro log-server*     inet:ipv4-address
| | | | +--ro dns-server*     inet:ipv4-address
| | | | +--ro network?       inet:ipv4-address
| | | | +--ro netmask?       inet:ipv4-address
| | | | +--ro low-address-in-range? inet:ipv4-address

```

---

```
| | +--ro high-address-in-range? inet:ipv4-address
| +--rw dhcp6-pools {feature-list:HAVE_IPV6}?
|   +--rw dhcp6-pool* [pool6-name]
|     +--rw pool6-name -> ../config/pool6-name
|     +--rw config
|       | +--rw pool6-name? string
|       | +--rw domain-name? string
|       | +--rw vendor-options? cml-data-types:cml_line_t
|       | +--rw ntp-server* inet:ipv6-address
|       | +--rw dns-server* inet:ipv6-address
|       | +--rw ipv6-network? inet:ipv6-address
|       | +--rw ipv6-netmask? uint8
|       | +--rw low-address-in-range? inet:ipv6-address
|       | +--rw high-address-in-range? inet:ipv6-address
|       | +--rw temporary-address? inet:ipv6-address
|       | +--rw ipv6-prefix-high-address? inet:ipv6-address
|       | +--rw ipv6-prefix-low-address? inet:ipv6-address
|       | +--rw ipv6-prefix-netmask? uint8
|     +--ro state
|       +--ro pool6-name? string
|       +--ro domain-name? string
|       +--ro vendor-options? cml-data-types:cml_line_t
|       +--ro ntp-server* inet:ipv6-address
|       +--ro dns-server* inet:ipv6-address
|       +--ro ipv6-network? inet:ipv6-address
|       +--ro ipv6-netmask? uint8
|       +--ro low-address-in-range? inet:ipv6-address
|       +--ro high-address-in-range? inet:ipv6-address
|       +--ro temporary-address? inet:ipv6-address
|       +--ro ipv6-prefix-high-address? inet:ipv6-address
|       +--ro ipv6-prefix-low-address? inet:ipv6-address
|       +--ro ipv6-prefix-netmask? uint8
+--rw snooping
  +--rw debug
    | +--rw config
    | | +--rw options? ipi-dhcp-snooping-types:dhcp_snooping_debug_t
```

---

```

| +--ro state
|   +--ro options?          ipi-dhcp-snooping-types:dhcp_snooping_debug_t
|   +--ro terminal-debug-status? ipi-dhcp-snooping-types:dhcp_snooping_debug_t
+--rw snooping-bridges
| +--rw snooping-bridge* [bridge-id]
|   +--rw bridge-id      -> ../config/bridge-id
|   +--rw config!
|     | +--rw snooping-enable    empty
|     | +--rw bridge-id?        -> /ipi-network-instance:network-instances/network-instance/instance-name
|     | +--rw verify-mac-address? empty
|     | +--rw option-82-enable?  empty
|     | +--rw write-delay?      uint32
|     | +--rw strict-validation? empty
|     | +--rw vlan-range?       cml-data-types:cml_range_t
|   +--ro state
|     | +--ro snooping-enable    empty
|     | +--ro bridge-id?        -> /ipi-network-instance:network-instances/network-instance/instance-name
|     | +--ro verify-mac-address? empty
|     | +--ro option-82-enable?  empty
|     | +--ro write-delay?      uint32
|     | +--ro strict-validation? empty
|     | +--ro vlan-range?       cml-data-types:cml_range_t
|   +--rw arp-inspection
|     | +--rw config!
|     | | +--rw enable          empty
|     | | +--rw validate?      ipi-dhcp-snooping-types:dhcp_snooping_validation_t
|     | | +--rw vlan-range?    cml-data-types:cml_range_t
|     | +--ro state
|     | | +--ro enable          empty
|     | | +--ro validate?      ipi-dhcp-snooping-types:dhcp_snooping_validation_t
|     | | +--ro vlan-range?    cml-data-types:cml_range_t
|     | +--ro counters
|     | | +--ro forwarded?     yang:counter32
|     | | +--ro dropped?       yang:counter32
|   +--rw vlans
|     +--rw vlan* [vlan-id]

```

---



```

|   +--rw vlan-id          -> ../config/vlan-id
|   +--rw config
|   |   +--rw vlan-id?    uint16
|   +--ro state
|   |   +--ro vlan-id?    uint16
|   |   +--ro statistics
|   |   |   +--ro static-entries-ipv4?  yang:counter32
|   |   |   +--ro dynamic-entries-ipv4? yang:counter32
|   |   |   +--ro static-entries-ipv6?  yang:counter32 {feature-list:HAVE_IPV6}?
|   |   |   +--ro dynamic-entries-ipv6? yang:counter32 {feature-list:HAVE_IPV6}?
|   +--rw mac-addresses-ipv4
|   |   +--rw mac-address-ipv4* [mac-address]
|   |   |   +--rw mac-address  -> ../config/mac-address
|   |   |   +--rw config
|   |   |   |   +--rw if-name      -> /ipi-interface:interfaces/interface/name
|   |   |   |   +--rw ipv4-address  inet:ipv4-address
|   |   |   |   +--rw mac-address?  cml-data-types:cml_mac_addr_t
|   |   |   +--ro state
|   |   |   |   +--ro if-name      -> /ipi-interface:interfaces/interface/name
|   |   |   |   +--ro ipv4-address  inet:ipv4-address
|   |   |   |   +--ro mac-address?  cml-data-types:cml_mac_addr_t
|   +--rw mac-addresses-ipv6 {feature-list:HAVE_IPV6}?
|   |   +--rw mac-address-ipv6* [mac-address]
|   |   |   +--rw mac-address  -> ../config/mac-address
|   |   |   +--rw config
|   |   |   |   +--rw if-name      -> /ipi-interface:interfaces/interface/name
|   |   |   |   +--rw ipv6-address  inet:ipv6-address
|   |   |   |   +--rw mac-address?  cml-data-types:cml_mac_addr_t
|   |   |   +--ro state
|   |   |   |   +--ro if-name      -> /ipi-interface:interfaces/interface/name
|   |   |   |   +--ro ipv6-address  inet:ipv6-address
|   |   |   |   +--ro mac-address?  cml-data-types:cml_mac_addr_t
|   +--ro snooping-binding-info
|   |   +--ro ipv4* [mac-address ip-address]
|   |   |   +--ro mac-address  -> ../state/mac-address
|   |   |   +--ro ip-address   -> ../state/ip-address

```

---

```

|      | +--ro state
|      |   +--ro mac-address?  cml-data-types:cml_mac_addr_t
|      |   +--ro lease-time?   uint32
|      |   +--ro type?         ipi-dhcp-snooping-types:dhcp_snooping_binding_type_t
|      |   +--ro if-name?      string
|      |   +--ro ip-address?    inet:ipv4-address
|      +--ro ipv6* [mac-address ip-address] {feature-list:HAVE_IPV6}?
|          +--ro mac-address    -> ../state/mac-address
|          +--ro ip-address     -> ../state/ip-address
|          +--ro state
|              +--ro mac-address?  cml-data-types:cml_mac_addr_t
|              +--ro lease-time?   uint32
|              +--ro type?         ipi-dhcp-snooping-types:dhcp_snooping_binding_type_t
|              +--ro if-name?      string
|              +--ro ip-address?    inet:ipv6-address
+--rw interfaces
+--rw interface* [name]
+--rw name          -> ../config/name
+--rw config
| +--rw name? -> /ipi-interface:interfaces/interface/name
+--ro state
| +--ro name? -> /ipi-interface:interfaces/interface/name
+--rw trust
| +--rw config
| | +--rw snooping-trust? empty
| +--ro state
|   +--ro snooping-trust? empty
+--rw verify
| +--rw config!
| | +--rw verify-snooping-vlan    empty
| | +--rw verify-access-group-mode? empty
| +--ro state
|   +--ro verify-snooping-vlan    empty
|   +--ro verify-access-group-mode? empty
+--ro snooping-binding-info
| +--ro ipv4-entries

```

---

```
| | +--ro ipv4-entry* [ip-address]
| |   +--ro ip-address  -> ../state/ip-address
| |   +--ro state
| |     +--ro interface?  string
| |     +--ro filter-type? ipi-dhcp-snooping-types:dhcp_snooping_filter_type_t
| |     +--ro vlan-id?    uint16
| |     +--ro mac-address? cml-data-types:cml_mac_addr_t
| |     +--ro ip-address?  inet:ipv4-address
| +--ro ipv6-entries {feature-list:HAVE_IPV6}?
|   +--ro ipv6-entry* [ip-address]
|     +--ro ip-address  -> ../state/ip-address
|     +--ro state
|       +--ro interface?  string
|       +--ro filter-type? ipi-dhcp-snooping-types:dhcp_snooping_filter_type_t
|       +--ro vlan-id?    uint16
|       +--ro mac-address? cml-data-types:cml_mac_addr_t
|       +--ro ip-address?  inet:ipv6-address
+--ro source-binding-info
  +--ro ipv4-entries
  | +--ro ipv4-entry* [ip-address]
  |   +--ro ip-address  -> ../state/ip-address
  |   +--ro state
  |     +--ro interface?  string
  |     +--ro filter-type? ipi-dhcp-snooping-types:dhcp_snooping_filter_type_t
  |     +--ro vlan-id?    uint16
  |     +--ro mac-address? cml-data-types:cml_mac_addr_t
  |     +--ro ip-address?  inet:ipv4-address
  +--ro ipv6-entries {feature-list:HAVE_IPV6}?
  | +--ro ipv6-entry* [ip-address]
  |   +--ro ip-address  -> ../state/ip-address
  |   +--ro state
  |     +--ro interface?  string
  |     +--ro filter-type? ipi-dhcp-snooping-types:dhcp_snooping_filter_type_t
  |     +--ro vlan-id?    uint16
  |     +--ro mac-address? cml-data-types:cml_mac_addr_t
  |     +--ro ip-address?  inet:ipv6-address
```

rpcs:

```
+---x clear-relay-stats {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_DHCP_RELAY,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
  
+---x clear-relay-option-stats {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_DHCP_RELAY,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
  
+---x clear-dhcpv6-pd-route {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_DHCP_RELAY,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w vrf-name   string  
  
+---x dhcp-snooping-write-database {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_L2,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w bridge-id  string  
  
+---x dhcp-snooping-renew-database {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_L2,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w bridge-id  string  
  
+---x dhcp-snooping-write-source-binding-database {feature-list:HAVE_DHCP_SNOOP,feature-  
list:HAVE_L2,feature-list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w bridge-id  string  
  
+---x dhcp-snooping-renew-source-database {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_L2,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w bridge-id  string  
  
+---x dhcp-snooping-clear-source-binding-database {feature-list:HAVE_DHCP_SNOOP,feature-  
list:HAVE_L2,feature-list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w bridge-id  string  
  
+---x dhcp-snooping-clear-database {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_L2,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w bridge-id  string  
  
+---x dhcp-snooping-terminal-debug-on {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_L2,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?  
| +---w input  
|   +---w terminal-debug-options  ipi-dhcp-snooping-types:dhcp_snooping_debug_t  
  
+---x dhcp-snooping-terminal-debug-off {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_L2,feature-  
list:HAVE_DHCP_CLIENT_OR_HAVE_HOSTPD_OR_HAVE_DHCP_SNOOP}?
```

```

+---w input
  +---w terminal-debug-options  ipi-dhcp-snooping-types:dhcp_snooping_debug_t

```

notifications:

```

+---n dhcpv6-relay-pd-route
  +--ro severity?      cml-data-types:cml_notif_severity_t
  +--ro eventClass?    cml-data-types:cml_notif_class_t
  +--ro vrf-name?      string
  +--ro interface-name? string
  +--ro state?         ipi-dhcp-relay-types:dhcp6_pd_route_state_t
  +--ro prefix?        cml-data-types:cml_ipv6_prefix_t
  +--ro next-hop?      inet:ipv6-address

```

---

## module: ipi-dns-client

```

+--rw dns
  +--rw vrfs
    | +--rw vrf* [vrf-name]
    |   +--rw vrf-name      -> ../config/vrf-name
    |   +--rw config
    |     | +--rw vrf-name?    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    |     {feature-list:HAVE_VRF}?
    |       | +--rw lookup-enabled?  boolean
    |       | +--rw default-domain-name? inet:domain-name
    |       +--ro state
    |         | +--ro vrf-name?    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    |         {feature-list:HAVE_VRF}?
    |           | +--ro lookup-enabled?  boolean
    |           | +--ro default-domain-name? inet:domain-name
    |           +--rw servers
    |             | +--rw server* [address]
    |             |   +--rw address  -> ../config/address
    |             |   +--rw config
    |             |     | +--rw address? inet:ip-address
    |             |     +--ro state
    |             +--ro address? inet:ip-address

```

```

|   +--rw search-domains
|   |   +--rw search-domain* [domain-name]
|   |   |   +--rw domain-name  -> ../config/domain-name
|   |   |   +--rw config
|   |   |   |   +--rw domain-name?  inet:domain-name
|   |   |   +--ro state
|   |   |   |   +--ro domain-name?  inet:domain-name
|   +--rw host-entries
|   |   +--rw host-entry* [hostname]
|   |   |   +--rw hostname  -> ../config/hostname
|   |   |   +--rw config
|   |   |   |   +--rw hostname?    cml-data-types:cml_host_string_t
|   |   |   |   +--rw ipv4-address?  inet:ipv4-address
|   |   |   |   +--rw ipv6-address?  inet:ipv6-address {feature-list:HAVE_IPV6}?
|   |   |   +--ro state
|   |   |   |   +--ro hostname?    cml-data-types:cml_host_string_t
|   |   |   |   +--ro ipv4-address?  inet:ipv4-address
|   |   |   |   +--ro ipv6-address?  inet:ipv6-address {feature-list:HAVE_IPV6}?
+--rw debug
|   +--rw config
|   |   +--rw enable?  empty
|   +--ro state
|   |   +--ro enable?          empty
|   |   +--ro terminal-debug-status?  cml-data-types:cml_on_off_t

```

rpcs:

```

+---x dns-client-terminal-debug-on {feature-list:HAVE_DNS_CLIENT}?
+---x dns-client-terminal-debug-off {feature-list:HAVE_DNS_CLIENT}?

```

---

## module: ipi-dns-relay

```

+--rw dns-relay
|   +--rw config
|   |   +--rw enable-dns-feature?  boolean
|   |   +--rw enable-dnsv4-relay?  boolean
|   |   +--rw enable-dnsv6-relay?  boolean {feature-list:HAVE_IPV6}?

```

---

```

| +--rw dns-server-v4-addr*  inet:ipv4-address
| +--rw dns-server-v6-addr*  inet:ipv6-address {feature-list:HAVE_IPV6}?
+--ro state
| +--ro enable-dns-feature?   boolean
| +--ro enable-dnsv4-relay?   boolean
| +--ro enable-dnsv6-relay?   boolean {feature-list:HAVE_IPV6}?
| +--ro dns-server-v4-addr*   inet:ipv4-address
| +--ro dns-server-v6-addr*   inet:ipv6-address {feature-list:HAVE_IPV6}?
+--rw interfaces
| +--rw interface* [name]
|   +--rw name      -> ../config/name
|   +--rw config
|     | +--rw name?          -> /ipi-interface:interfaces/interface/name
|     | +--rw enable-dnsv4-relay?  empty
|     | +--rw enable-dnsv6-relay?  empty {feature-list:HAVE_IPV6}?
|     | +--rw dns-relay-uplink?    empty
|     | +--rw dns-relay-v6-uplink? empty {feature-list:HAVE_IPV6}?
|     +--ro state
|       +--ro name?          -> /ipi-interface:interfaces/interface/name
|       +--ro enable-dnsv4-relay?  empty
|       +--ro enable-dnsv6-relay?  empty {feature-list:HAVE_IPV6}?
|       +--ro dns-relay-uplink?    empty
|       +--ro dns-relay-v6-uplink? empty {feature-list:HAVE_IPV6}?
+--rw vrfs {feature-list:HAVE_VRF}?
  +--rw vrf* [vrf-name]
    +--rw vrf-name  -> ../config/vrf-name
    +--rw config
    | +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    | +--rw dns-server-v4-addr*  inet:ipv4-address
    | +--rw dns-server-v6-addr*  inet:ipv6-address {feature-list:HAVE_IPV6}?
    +--ro state
      +--ro vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
      +--ro dns-server-v4-addr*  inet:ipv4-address
      +--ro dns-server-v6-addr*  inet:ipv6-address {feature-list:HAVE_IPV6}?

```

---

---

## module: ipi-efm

```

+--rw ethernet-oam
  +--rw interfaces
    | +--rw interface* [name]
    |   +--rw name      -> ../config/name
    |   +--rw config
    |     | +--rw name?                -> /ipi-interface:interfaces/interface/name
    |     | +--rw enable?              empty
    |     | +--rw mode?                ipi-efm-types:ethernet_oam_mode_t
    |     | +--rw link-lost-timeout?    uint8
    |     | +--rw pdu-min-rate?         uint8
    |     | +--rw pdu-max-rate?        uint8
    |     | +--rw unidirectional-link-support? empty
    |     | +--rw remote-loopback-support? empty
    |     | +--rw remote-loopback-timeout? uint8
    |     | +--rw link-monitor-support? empty
    |     | +--rw link-monitor-off?     empty
    |     | +--rw link-monitor-event-log-size? uint8
    |     | +--rw disable-port-on-remote-failure-events? ipi-efm-types:ethernet_oam_remote_failure_events_t
    |     | +--rw remote-loopback-start? empty
    |   +--ro state
    |     +--ro name?                -> /ipi-interface:interfaces/interface/name
    |     +--ro enable?              empty
    |     +--ro mode?                ipi-efm-types:ethernet_oam_mode_t
    |     +--ro link-lost-timeout?    uint8
    |     +--ro pdu-min-rate?         uint8
    |     +--ro pdu-max-rate?        uint8
    |     +--ro unidirectional-link-support? empty
    |     +--ro remote-loopback-support? empty
    |     +--ro remote-loopback-timeout? uint8
    |     +--ro link-monitor-support? empty
    |     +--ro link-monitor-off?     empty
    |     +--ro link-monitor-event-log-size? uint8
    |     +--ro disable-port-on-remote-failure-events? ipi-efm-types:ethernet_oam_remote_failure_events_t
    |     +--ro remote-loopback-start? empty

```



```

|   +--ro if-index?          uint32
|   +--ro interface-state?   ipi-efm-types:ethernet_oam_oper_status_t
+--rw debug
  +--rw config
  |   +--rw options? ipi-efm-types:ethernet_oam_debug_t
  +--ro state
    +--ro options?          ipi-efm-types:ethernet_oam_debug_t
    +--ro terminal-debug-status? ipi-efm-types:ethernet_oam_debug_t

```

rpcs:

```

+---x efm-terminal-debug-on {feature-list:HAVE_EFM,feature-list:HAVE_ONMD}?
| +---w input
|   +---w terminal-debug-status ipi-efm-types:ethernet_oam_debug_t
+---x efm-terminal-debug-off {feature-list:HAVE_EFM,feature-list:HAVE_ONMD}?
| +---w input
|   +---w terminal-debug-status ipi-efm-types:ethernet_oam_debug_t
+---x clear-interface-oam-counters {feature-list:HAVE_EFM,feature-list:HAVE_ONMD}?
  +---w input
    +---w name string

```

---

## module: ipi-elk

```

+--rw elk
  +--rw metricbeats
  |   +--rw metricbeat* [ip]
  |   |   +--rw ip      -> ../config/ip
  |   |   +--rw config
  |   |   |   +--rw ip?    inet:ipv4-address
  |   |   |   +--rw username string
  |   |   |   +--rw password string
  |   |   +--ro state
  |   |   |   +--ro ip?    inet:ipv4-address
  |   |   |   +--ro username string
  |   |   |   +--ro password string
  +--rw filebeats
  |   +--rw filebeat* [ip]

```

```

+--rw ip      -> ../config/ip
+--rw config
| +--rw ip?      inet:ipv4-address
| +--rw certificate-path? string
+--ro state
  +--ro ip?      inet:ipv4-address
  +--ro certificate-path? string

```

rpcs:

```

+---x elk-metricbeat-service-enable {feature-list:HAVE_HOSTPD}?
| +---w input
|   +---w vrf-name string
+---x elk-filebeat-service-enable {feature-list:HAVE_HOSTPD}?
| +---w input
|   +---w vrf-name string
+---x elk-metricbeat-service-disable {feature-list:HAVE_HOSTPD}?
| +---w input
|   +---w vrf-name string
+---x elk-filebeat-service-disable {feature-list:HAVE_HOSTPD}?
  +---w input
    +---w vrf-name string

```

---

## module: ipi-erpsv2

```

+--rw erpsv2 {feature-list:HAVE_G8032V2}?
  +--rw rings
  | +--rw ring* [ring-name]
  |   +--rw ring-name -> ../config/ring-name
  |   +--rw config
  |     | +--rw ring-name? string
  |     | +--rw east-interface? -> /ipi-interface:interfaces/interface/name
  |     | +--rw west-interface? -> /ipi-interface:interfaces/interface/name
  |     | +--rw description? cml-data-types:cml_line_t
  |     +--ro state
  |       +--ro ring-name? string

```

---

```

|   +--ro east-interface?  -> /ipi-interface:interfaces/interface/name
|   +--ro west-interface?  -> /ipi-interface:interfaces/interface/name
|   +--ro description?     cml-data-types:cml_line_t
+--rw profiles
| +--rw profile* [profile-name]
|   +--rw profile-name    -> ../config/profile-name
|   +--rw config
|     | +--rw profile-name?      string
|     | +--rw wait-to-restore-timer? uint8
|     | +--rw hold-off-timer?     uint16
|     | +--rw guard-time?        uint16
|     | +--rw protection-mode?    ipi-erpsv2-types:erpsv2_protection_mode_t
|     +--ro state
|       +--ro profile-name?      string
|       +--ro wait-to-restore-timer? uint8
|       +--ro hold-off-timer?     uint16
|       +--ro guard-time?        uint16
|       +--ro protection-mode?    ipi-erpsv2-types:erpsv2_protection_mode_t
|       +--ro wait-to-block-time? uint32
+--rw erp-instances
| +--rw erp-instance* [name]
|   +--rw name            -> ../config/name
|   +--rw config
|     | +--rw name?              string
|     | +--rw ring-name?         -> /erpsv2/rings/ring/ring-name
|     | +--rw mapped-profile-name? -> /erpsv2/profiles/profile/profile-name
|     | +--rw ring-type?         ipi-erpsv2-types:erpsv2_ring_type_t
|     | +--rw enable-tcn-propagation? empty
|     | +--rw tcn-to-instances*   string
|     | +--rw non-virtual-channel? empty
|     | +--rw ring-id?           uint8
|     | +--rw description?       cml-data-types:cml_line_t
|     +--ro state
|       | +--ro name?            string
|       | +--ro ring-name?       -> /erpsv2/rings/ring/ring-name
|       | +--ro mapped-profile-name? -> /erpsv2/profiles/profile/profile-name

```

---

---

```

| | +--ro ring-type?          ipi-erpsv2-types:erpsv2_ring_type_t
| | +--ro enable-tcn-propagation? empty
| | +--ro tcn-to-instances*    string
| | +--ro non-virtual-channel? empty
| | +--ro ring-id?            uint8
| | +--ro description?        cml-data-types:cml_line_t
| | +--ro current-state?      ipi-erpsv2-types:erpsv2_ring_state_t
| | +--ro previous-state?     ipi-erpsv2-types:erpsv2_ring_state_t
| +--rw associate-rings
| | +--rw associate-ring* [associate-ring-name]
| |   +--rw associate-ring-name -> ../config/associate-ring-name
| |   +--rw config
| |     | +--rw associate-ring-name? string
| |     +--ro state
| |       +--ro associate-ring-name? string
| +--rw instance-role
| | +--rw config
| | | +--rw (role-option)?
| | |   +--:(owner)
| | |     | +--rw owner-port-id?      ipi-erpsv2-types:erpsv2_port_id_t
| | |     +--:(neighbor)
| | |       | +--rw neighbor-port-id?  ipi-erpsv2-types:erpsv2_port_id_t
| | |       +--:(next-neighbor)
| | |         | +--rw next-neighbor-port-id? ipi-erpsv2-types:erpsv2_port_id_t
| | |         +--:(non-owner)
| | |           +--rw non-owner?      empty
| | +--ro state
| |   +--ro (role-option)?
| |     +--:(owner)
| |       | +--ro owner-port-id?      ipi-erpsv2-types:erpsv2_port_id_t
| |       +--:(neighbor)
| |         | +--ro neighbor-port-id?  ipi-erpsv2-types:erpsv2_port_id_t
| |         +--:(next-neighbor)
| |           | +--ro next-neighbor-port-id? ipi-erpsv2-types:erpsv2_port_id_t
| |           +--:(non-owner)
| |             +--ro non-owner?      empty

```

---

---

```

|   +--rw aps-channel
|   |   +--rw config
|   |   |   +--rw level?  uint8
|   |   |   +--ro state
|   |   |       +--ro level?  uint8
|   +--rw aps-channel-vlans
|   |   +--rw aps-channel-vlan* [vlan-id]
|   |       +--rw vlan-id  -> ../config/vlan-id
|   |       +--rw config
|   |           +--rw vlan-id?      uint16
|   |           +--rw inner-vlan-id? uint16
|   |           +--ro state
|   |               +--ro vlan-id?      uint16
|   |               +--ro inner-vlan-id? uint16
|   +--rw data
|   |   +--rw config
|   |       +--rw data-vlan?  cml-data-types:cml_range_t
|   |       +--ro state
|   |           +--ro data-vlan?  cml-data-types:cml_range_t
|   +--rw virtual-channel
|   |   +--rw config!
|   |       +--rw channel-id      uint16
|   |       +--rw attached-instance -> /erpsv2/erp-instances/erp-instance/name
|   |       +--ro state
|   |           +--ro channel-id      uint16
|   |           +--ro attached-instance -> /erpsv2/erp-instances/erp-instance/name
|   +--rw east-link
|   |   +--ro state
|   |       +--ro link-name?          string
|   |       +--ro link-state?          ipi-erpsv2-types:erpsv2_link_state_t
|   |       +--ro remote-node-id?      cml-data-types:cml_mac_addr_t
|   |       +--ro remote-blocked-port-reference?  uint8
|   +--rw west-link
|   |   +--ro state
|   |       +--ro link-name?          string
|   |       +--ro link-state?          ipi-erpsv2-types:erpsv2_link_state_t

```

---

---

```

| | +--ro remote-node-id?          cml-data-types:cml_mac_addr_t
| | +--ro remote-blocked-port-reference? uint8
| +--rw aps-statistics
|   +--ro state
|     +--ro tx-ring-aps-messages? yang:counter32
|     +--ro rx-ring-aps-messages? yang:counter32
+--rw debug
| +--rw config
| | +--rw options? ipi-erpsv2-types:erpsv2_debug_t
| +--ro state
|   +--ro options?          ipi-erpsv2-types:erpsv2_debug_t
|   +--ro terminal-debug-status? ipi-erpsv2-types:erpsv2_debug_t
+--rw subinterfaces

```

rpcs:

```

+---x erpsv2-switch-erp-instance {feature-list:HAVE_G8032V2,feature-list:HAVE_ONMD}?
| +---w input
|   +---w instance-name  string
|   +---w operation      ipi-erpsv2-types:erpsv2_switch_operation_t
|   +---w port-id        ipi-erpsv2-types:erpsv2_port_id_t
+---x erpsv2-clear-ring-erp-instance {feature-list:HAVE_G8032V2,feature-list:HAVE_ONMD}?
| +---w input
|   +---w instance-name  string
+---x erpsv2-clear-aps-statistics {feature-list:HAVE_G8032V2,feature-list:HAVE_ONMD}?
| +---w input
|   +---w instance-name  string
+---x erpsv2-terminal-debug-on {feature-list:HAVE_G8032V2}?
| +---w input
|   +---w terminal-debug-options  ipi-erpsv2-types:erpsv2_debug_t
+---x erpsv2-terminal-debug-off {feature-list:HAVE_G8032V2}?
  +---w input
    +---w terminal-debug-options  ipi-erpsv2-types:erpsv2_debug_t

```

notifications:

```

+---n erpsv2-instance-state-change-notification {feature-list:HAVE_G8032V2}?
| +--ro severity?      cml-data-types:cml_notif_severity_t

```

```

| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?         string
| +--ro current-state? ipi-erpsv2-types:erpsv2_ring_state_t
| +--ro previous-state? ipi-erpsv2-types:erpsv2_ring_state_t
+---n erpsv2-east-interface-state-change-notification {feature-list:HAVE_G8032V2}?
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
| +--ro link-name?   string
| +--ro link-state?  ipi-erpsv2-types:erpsv2_link_state_t
+---n erpsv2-west-interface-state-change-notification {feature-list:HAVE_G8032V2}?
  +--ro severity?    cml-data-types:cml_notif_severity_t
  +--ro eventClass?  cml-data-types:cml_notif_class_t
  +--ro name?        string
  +--ro link-name?   string
  +--ro link-state?  ipi-erpsv2-types:erpsv2_link_state_t

```

---

## module: ipi-ethernet-vpn

```

+--rw evpn
  +--rw multi-homing
    | +--rw config
    | | +--rw esi-hold-time? uint32 {feature-list:HAVE_BGP_EVPN}?
    | | +--ro state
    | |   +--ro esi-hold-time? uint32 {feature-list:HAVE_BGP_EVPN}?
  +--rw global
    | +--rw config
    | | +--rw enable-vxlan-multihoming? empty {feature-list:HAVE_TUNNEL,feature-list:HAVE_NVO}?
    | | +--rw enable-irb?                empty {feature-list:HAVE_TUNNEL,feature-list:HAVE_NVO}?
    | | +--rw enable-evpn-etree?         empty {feature-list:HAVE_BGP_EVPN,feature-list:HAVE_NVO}?
    | | +--ro state
    | |   +--ro enable-vxlan-multihoming? empty {feature-list:HAVE_TUNNEL,feature-list:HAVE_NVO}?
    | |   +--ro enable-irb?                empty {feature-list:HAVE_TUNNEL,feature-list:HAVE_NVO}?
    | |   +--ro enable-evpn-etree?         empty {feature-list:HAVE_BGP_EVPN,feature-list:HAVE_NVO}?
  +--rw irb-forwarding

```

---

```

| +--rw config
| | +--rw mac-address?  cml-data-types:cml_mac_addr_t {feature-list:HAVE_TUNNEL,feature-
list:HAVE_NVO,feature-list:HAVE_BGP_EVPN}?
| | +--ro state
| | | +--ro mac-address?  cml-data-types:cml_mac_addr_t {feature-list:HAVE_TUNNEL,feature-
list:HAVE_NVO,feature-list:HAVE_BGP_EVPN}?
| | +--rw irb-interfaces
| |   +--rw irb-interface* [name]
| |     +--rw name      -> ../config/name
| |     +--rw config
| |       | +--rw name?      -> /ipi-interface:interfaces/interface/name {feature-list:HAVE_TUNNEL,feature-
list:HAVE_NVO,feature-list:HAVE_BGP_EVPN}?
| |       | +--rw gateway-mac?  empty {feature-list:HAVE_TUNNEL,feature-list:HAVE_NVO,feature-
list:HAVE_VXLAN,feature-list:HAVE_BGP_EVPN}?
| |       | +--ro state
| |       | +--ro name?      -> /ipi-interface:interfaces/interface/name {feature-list:HAVE_TUNNEL,feature-
list:HAVE_NVO,feature-list:HAVE_BGP_EVPN}?
| |       | +--ro gateway-mac?  empty {feature-list:HAVE_TUNNEL,feature-list:HAVE_NVO,feature-
list:HAVE_VXLAN,feature-list:HAVE_BGP_EVPN}?
| |     +--rw interfaces
| |       +--rw interface* [name]
| |         +--rw name      -> ../config/name
| |         +--rw config
| |           | +--rw name?      -> /ipi-interface:interfaces/interface/name
| |           | +--rw evpn-segment-id?  string
| |           | +--rw system-mac?    cml-data-types:cml_mac_addr_t
| |           | +--ro state
| |           | +--ro name?      -> /ipi-interface:interfaces/interface/name
| |           | +--ro evpn-segment-id?  string
| |           | +--ro system-mac?    cml-data-types:cml_mac_addr_t
| |         +--rw access-interfaces
| +--rw vrfs
| +--rw vrf* [vrf-name]
|   +--rw vrf-name  -> ../config/vrf-name
|   +--rw config
|     +--rw vrf-name?  -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
|     +--rw service-type?  cml-data-types:cml_evpn_service_type_t
|     +--ro state

```

---



```

+--ro vrf-name?    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
+--ro service-type? cml-data-types:cml_evpn_service_type_t

```

---

## module: ipi-event-manager

```

+--rw event-manager
|
| +--rw config
| |
| | +--rw feature? cml-data-types:cml_enable_disable_t
| |
| | +--ro state
| | |
| | | +--ro feature? cml-data-types:cml_enable_disable_t
| | |
| | +--rw event-entries
| | |
| | | +--rw event-entry* [event-name]
| | | |
| | | | +--rw event-name -> ../config/event-name
| | | |
| | | | +--rw config
| | | | |
| | | | | +--rw event-name? string
| | | | | +--rw event-type ipi-event-manager-types:event_manager_event_type_t
| | | | | +--rw event-id string
| | | | | +--rw event-pattern? cml-data-types:cml_line_t
| | | | | +--rw severity? ipi-event-manager-types:event_manager_severity_level_t
| | | |
| | | | +--ro state
| | | | |
| | | | | +--ro event-name? string
| | | | | +--ro event-type ipi-event-manager-types:event_manager_event_type_t
| | | | | +--ro event-id string
| | | | | +--ro event-pattern? cml-data-types:cml_line_t
| | | | | +--ro severity? ipi-event-manager-types:event_manager_severity_level_t
| | | | | +--ro trigger-count? yang:counter64
| | | | | +--ro policy-count? yang:counter64
| | | | | +--ro status? ipi-event-manager-types:event_manager_status_t
| | | | | +--ro policy-map? -> /event-manager/policies/policy/config/policy-name
| | |
| | +--rw action-entries
| | |
| | | +--rw action-entry* [action-name]
| | | |
| | | | +--rw action-name -> ../config/action-name
| | | |
| | | | +--rw config
| | | | |
| | | | | +--rw action-name? string
| | | | | +--rw action-type ipi-event-manager-types:event_manager_action_type_t

```

```

| | +--rw action-script  string
| +--ro state
|   +--ro action-name?   string
|   +--ro action-type    ipi-event-manager-types:event_manager_action_type_t
|   +--ro action-script  string
|   +--ro trigger-count? yang:counter64
|   +--ro policy-count?  yang:counter64
|   +--ro status?        ipi-event-manager-types:event_manager_status_t
|   +--ro policy-map*    -> /event-manager/policies/policy/config/policy-name
+--rw policies
  +--rw policy* [policy-name]
    +--rw policy-name -> ../config/policy-name
    +--rw config
      | +--rw policy-name? string
      | +--rw event-name   -> /event-manager/event-entries/event-entry/event-name
      | +--rw action-name  -> /event-manager/action-entries/action-entry/action-name
      +--ro state
        +--ro policy-name?      string
        +--ro event-name        -> /event-manager/event-entries/event-entry/event-name
        +--ro action-name       -> /event-manager/action-entries/action-entry/action-name
        +--ro trigger-count?    yang:counter64
        +--ro status?           ipi-event-manager-types:event_manager_status_t
        +--ro last-execution-status? ipi-event-manager-types:event_manager_execution_status_t
        +--ro last-execution-time? string

```

rpcs:

```

+---x event-manager-clear-statistics-all {feature-list:HAVE_VLOGD,feature-list:HAVE_EVENT_MANAGER}?
+---x event-manager-clear-statistics-on-policy {feature-list:HAVE_VLOGD,feature-list:HAVE_EVENT_MANAGER}?
  +---w input
    +---w policy-name  string

```

---

## module: ipi-host

```

+--rw system-host {feature-list:HAVE_IMI}?
  +--rw config

```

---

```

| +--rw banner-motd?          cml-data-types:cml_banner_t
| +--rw banner-motd-file?     cml-data-types:cml_file_t
| +--rw service-passwd-encryption?  boolean
| +--rw service-term-length?    uint16
| +--rw system-enable-passwd?    cml-data-types:cml_line_t
| +--rw passwd-encrypted?       empty
| +--rw disable-default-autoenable?  empty
| +--rw disable-service-advanced-vty? empty
+--ro state
  +--ro banner-motd?          cml-data-types:cml_banner_t
  +--ro banner-motd-file?     cml-data-types:cml_file_t
  +--ro service-passwd-encryption?  boolean
  +--ro service-term-length?    uint16
  +--ro system-enable-passwd?    cml-data-types:cml_line_t
  +--ro passwd-encrypted?       empty
  +--ro disable-default-autoenable?  empty
  +--ro disable-service-advanced-vty? empty

```

---

## module: ipi-hwtable

notifications:

```

+---n hwtable-monitor-full-notification
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message?   string
+---n hwtable-monitor-full-clear-notification
  +--ro severity?  cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message?   string

```

---

## module: ipi-if-aggregate

augment /ipi-interface:interfaces/ipi-interface:interface:

```

+--rw member-aggregation
  +--rw config!
    | +--rw agg-type      ipi-lag-types:lag_link_agg_type_t
    | +--rw aggregate-id  uint16
    | +--rw lacp-mode     ipi-lag-types:lacp_mode_t
    +--ro state
      +--ro agg-type      ipi-lag-types:lag_link_agg_type_t
      +--ro aggregate-id  uint16
      +--ro lacp-mode     ipi-lag-types:lacp_mode_t
augment /ipi-interface:interfaces/ipi-interface:interface:
+--rw aggregator
  +--rw config
    | +--rw min-links?    uint8 {feature-list:HAVE_LACP}?
    | +--rw min-bandwidth? string {feature-list:HAVE_LACP}?
    +--ro state
      | +--ro min-links?    uint8 {feature-list:HAVE_LACP}?
      | +--ro min-bandwidth? string {feature-list:HAVE_LACP}?
      | +--ro agg-min-links-state? ipi-lag-types:lag_agg_min_links_status
      +--ro members
        +--ro member* [link-name]
          +--ro link-name  -> ../state/link-name
          +--ro state
            +--ro link-name?  string
            +--ro link-state? ipi-lag-types:lag_member_link_status_t

notifications:
+---n agg-min-links-state-update
  +--ro severity?      cml-data-types:cml_notif_severity_t
  +--ro eventClass?    cml-data-types:cml_notif_class_t
  +--ro name?          string
  +--ro agg-min-links-state? ipi-lag-types:lag_agg_min_links_status

```

---

## module: ipi-if-ethernet

```

augment /ipi-interface:interfaces/ipi-interface:interface:

```

```

+--rw ethernet
  +--rw config
    | +--rw duplex-mode?      ipi-if-types:if_duplex_t
    | +--rw mac-address?      cml-data-types:cml_mac_addr_t {feature-list:NOT_HAVE_DUNE}?
    | +--rw secondary-mac-address? empty {feature-list:HAVE_MLAG}?
    | +--rw port-speed?      ipi-if-types:if_interface_speed_t {feature-list:NOT_HAVE_TIBIT}?
    +--ro state
      | +--ro duplex-mode?      ipi-if-types:if_duplex_t
      | +--ro mac-address?      cml-data-types:cml_mac_addr_t {feature-list:NOT_HAVE_DUNE}?
      | +--ro secondary-mac-address? empty {feature-list:HAVE_MLAG}?
      | +--ro port-speed?      ipi-if-types:if_interface_speed_t {feature-list:NOT_HAVE_TIBIT}?
      | +--ro hw-mac-address?    cml-data-types:cml_mac_addr_t
      | +--ro negotiated-duplex-mode? ipi-if-types:if_duplex_t
      | +--ro negotiated-port-speed? ipi-if-types:if_interface_speed_t
      | +--ro counters
        | +--ro in-mac-control-frames? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
        | +--ro in-mac-pause-frames?  yang:counter64
        | +--ro in-undersize-frames?  yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
        | +--ro in-oversize-frames?   yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
        | +--ro in-fragment-frames?   yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
        | +--ro in-jabber-frames?     yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
        | +--ro in-crc-errors?        yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
        | +--ro out-mac-control-frames? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
        | +--ro out-mac-pause-frames? yang:counter64
        | +--ro in-distribution
          | | +--ro in-frames-64-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
          | | +--ro in-frames-65-127-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
          | | +--ro in-frames-128-255-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
          | | +--ro in-frames-256-511-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?

```

```

    | | +--ro in-frames-512-1023-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    | | +--ro in-frames-1024-1518-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    | | +--ro in-frames-1519-2047-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    | | +--ro in-frames-2048-4095-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    | | +--ro in-frames-4096-9216-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    | | +--ro in-frames-9217-16383-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    | +--ro out-distribution
    |   +--ro out-frames-64-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-65-127-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-128-255-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-256-511-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-512-1023-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-1024-1518-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-1519-2047-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-2048-4095-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-4096-9216-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    |   +--ro out-frames-9217-16383-octets? yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR}?
    +--rw flow-control {feature-list:HAVE_L2}?
    +--rw config
    | +--rw enable-rcv? ipi-if-types:if_flowctrl_t {feature-list:HAVE_L2}?
    | +--rw enable-snd? ipi-if-types:if_flowctrl_t {feature-list:HAVE_L2}?
    +--ro state
    +--ro enable-rcv? ipi-if-types:if_flowctrl_t {feature-list:HAVE_L2}?
    +--ro enable-snd? ipi-if-types:if_flowctrl_t {feature-list:HAVE_L2}?
    +--ro rcv-oper-status? ipi-if-types:if_flowctrl_t
    +--ro snd-oper-status? ipi-if-types:if_flowctrl_t

```

---

## module: ipi-if-extended

```

+--rw mac-ageing
  +--rw config
    | +--rw hit-based-ageing? ipi-if-types:cml_mac_ageing_t {feature-list:NOT_HAVE_DUNE}?
  +--ro state
    +--ro hit-based-ageing? ipi-if-types:cml_mac_ageing_t {feature-list:NOT_HAVE_DUNE}?

```

augment /ipi-interface:interfaces/ipi-interface:interface:

```

+--rw extended
  +--rw l2-control-protocol* [l2cp-type] {feature-list:HAVE_L2}?
    | +--rw l2cp-type -> ../config/l2cp-type
    | +--rw config
    | | +--rw l2cp-type? ipi-if-types:if_l2cp_t
    | | +--rw protocol-process ipi-if-types:if_l2cp_process_t
    | +--ro state
    | +--ro l2cp-type? ipi-if-types:if_l2cp_t
    | +--ro protocol-process ipi-if-types:if_l2cp_process_t
  +--rw config
    | +--rw link-flap-error-disable? empty {feature-list:HAVE_L2}?
    | +--rw storm-control-error-disable? empty {feature-list:HAVE_RATE_LIMIT}?
    | +--rw mac-move-limit-error-disable? empty {feature-list:HAVE_L2}?
    | +--rw mac-move-priority? uint32 {feature-list:HAVE_L2}?
    | +--rw disable-snmp-trap-link-status? empty
    | +--rw mau-default-type? ipi-if-types:if_mautype_t {feature-list:HAVE_L2}?
    | +--rw debounce-time? uint16
    | +--rw protected-port? ipi-if-types:if_protected_port_type_t
    | +--rw ucmp-port? ipi-if-types:if_ucmp_state
  +--ro state
    | +--ro link-flap-error-disable? empty {feature-list:HAVE_L2}?
    | +--ro storm-control-error-disable? empty {feature-list:HAVE_RATE_LIMIT}?
    | +--ro mac-move-limit-error-disable? empty {feature-list:HAVE_L2}?
    | +--ro mac-move-priority? uint32 {feature-list:HAVE_L2}?
    | +--ro disable-snmp-trap-link-status? empty
    | +--ro mau-default-type? ipi-if-types:if_mautype_t {feature-list:HAVE_L2}?

```

---

```

| +--ro debounce-time?          uint16
| +--ro protected-port?         ipi-if-types:if_protected_port_type_t
| +--ro ucmp-port?              ipi-if-types:if_ucmp_state
| +--ro properties?             ipi-if-types:if_iface_prop_t
| +--ro mapped-name?            string
| +--ro if-counter-discontinuity-time? yang:timestamp
| +--ro slot-id?                uint32
| +--ro hardware-type?          ipi-if-types:if_hw_type_t
| +--ro storm-total-discards?    yang:counter64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_RATE_LIMIT,feature-list:NOT_HAVE_DUNE}?
| +--ro metric?                 int32
| +--ro if-type?                ipi-if-types:if_interface_type_t
| +--ro trust-state?            ipi-if-types:if_trust_state_t {feature-list:HAVE_QOS}?
| +--ro monitor-port-grp?       boolean {feature-list:HAVE_TFO}?
| +--ro failover-link-type?      ipi-if-types:if_tfo_link_type_t {feature-list:HAVE_TFO}?
| +--ro udid-flush-transmitted?  uint16 {feature-list:HAVE_UDLD}?
| +--ro debounce-flap-count?     uint16
| +--ro debounce-last-flap-time? yang:date-and-time
| +--ro debounce-remain-time?    yang:counter32
| +--ro debounce-running-status? ipi-if-types:if_debounce_running_state
| +--ro debounce-config-status?  ipi-if-types:if_debounce_running_state
| +--ro last-flapped?            ipi-if-types:if_last_clear_time_t
| +--ro auto-ipv6-link-local-address? cml-data-types:cml_ipv6_prefix_t {feature-list:HAVE_IPV6}?
+--rw bandwidth-management
| +--rw config
|   +--rw enable-re-routing? empty
+--rw port-monitor
| +--rw config
| | +--rw enable-speed? empty
| | +--rw enable-queue-drops? empty
| +--ro state
| | +--ro enable-speed? empty
| | +--ro enable-queue-drops? empty
| +--rw port-monitor-threshold
|   +--rw config!
| | +--rw warning-threshold  uint8
| | +--rw recovery-threshold uint8

```

---



---

```

|   +--ro state
|   +--ro warning-threshold   uint8
|   +--ro recovery-threshold  uint8
+--ro capabilities {feature-list:HAVE_HAL}?
| +--ro state
|   +--ro speed-half-duplex?  string
|   +--ro speed-full-duplex?  string
|   +--ro pause?              ipi-if-types:if_raw_string_t
|   +--ro interface-type?     ipi-if-types:if_raw_string_t
|   +--ro medium?             ipi-if-types:if_raw_string_t
|   +--ro loopback?           ipi-if-types:if_raw_string_t
|   +--ro flags?              string
|   +--ro eee?                ipi-if-types:if_raw_string_t
|   +--ro fcmapi?             string
|   +--ro encapsulation?      ipi-if-types:if_raw_string_t
|   +--ro fec?                ipi-if-types:if_raw_string_t
+--rw aclif
| +--rw config
| | +--rw aclif-type? ipi-if-types:if_aclif_type_t
| +--ro state
|   +--ro aclif-type? ipi-if-types:if_aclif_type_t
+--rw link-debounce-time
  +--rw config!
  | +--rw linkup-debounce-time   uint16
  | +--rw linkdown-debounce-time uint16
  +--ro state
    +--ro linkup-debounce-time   uint16
    +--ro linkdown-debounce-time uint16
augment /ipi-interface:interfaces/ipi-interface:interface/ipi-if-ethernet:ethernet:
+--rw extended-ethernet
  +--rw config
  | +--rw forward-err-correction? ipi-if-types:if_intf_fec_t
  | +--rw load-interval?          uint16 {feature-list:HAVE_BROADCOM_OR_HAVE_MARVELL}?
  +--ro state
  | +--ro forward-err-correction? ipi-if-types:if_intf_fec_t
  | +--ro load-interval?          uint16 {feature-list:HAVE_BROADCOM_OR_HAVE_MARVELL}?

```

---

---

```

| +--ro default-duplex-mode?   uint8
| +--ro default-speed?        string
+--rw switchport-allowed-ether-types {feature-list:HAVE_ALLOWED_ETHERTYPE}?
  +--rw config
  | +--rw arp?                 boolean
  | +--rw ipv4?                boolean
  | +--rw ipv6?                boolean
  | +--rw mpls?                boolean
  | +--rw ether-type-value*    string
  | +--rw log?                 boolean
+--ro state {feature-list:HAVE_ALLOWED_ETHERTYPE}?
  +--ro statistics* [ether-type]
  | +--ro ether-type   ipi-if-types:if_switchport_ethertype_t
  | +--ro packets?     yang:counter64
  | +--ro bytes?       yang:counter64
  +--ro arp?           boolean
  +--ro ipv4?           boolean
  +--ro ipv6?           boolean
  +--ro mpls?           boolean
  +--ro ether-type-value* string
  +--ro log?            boolean
augment /ipi-interface:interfaces/ipi-interface:interface/ipi-if-ethernet:ethernet:
+--rw storm-control {feature-list:HAVE_RATE_LIMIT}?
  +--rw broadcast {feature-list:HAVE_RATE_LIMIT}?
  | +--rw config! {feature-list:HAVE_RATE_LIMIT}?
  | | +--rw bcast-value          ipi-if-types:if_rate_limit_t
  | | +--rw bcast-rate-limit-format ipi-if-types:if_rate_limit_type
  | | +--rw bcast-burst-value    uint32
  | +--ro state {feature-list:HAVE_RATE_LIMIT}?
  |   +--ro bcast-value          ipi-if-types:if_rate_limit_t
  |   +--ro bcast-rate-limit-format ipi-if-types:if_rate_limit_type
  |   +--ro bcast-burst-value    uint32
  |   +--ro hardware-applied-bcast-value? decimal64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_RATE_LIMIT}?
  +--rw multicast {feature-list:HAVE_RATE_LIMIT}?
  | +--rw config! {feature-list:HAVE_RATE_LIMIT}?
  | | +--rw mcast-value          ipi-if-types:if_rate_limit_t

```

---

```

| | +--rw mcast-rate-limit-format  ipi-if-types:if_rate_limit_type
| | +--rw mcast-burst-value        uint32
| +--ro state {feature-list:HAVE_RATE_LIMIT}?
|   +--ro mcast-value              ipi-if-types:if_rate_limit_t
|   +--ro mcast-rate-limit-format  ipi-if-types:if_rate_limit_type
|   +--ro mcast-burst-value        uint32
|   +--ro hardware-applied-mcast-value? decimal64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_RATE_LIMIT}?
+--rw dlf-broadcast {feature-list:HAVE_RATE_LIMIT}?
+--rw config! {feature-list:HAVE_RATE_LIMIT}?
| +--rw dlf-bcast-value            ipi-if-types:if_rate_limit_t
| +--rw dlf-bcast-rate-limit-format ipi-if-types:if_rate_limit_type
| +--rw dlf-bcast-burst-value      uint32
+--ro state {feature-list:HAVE_RATE_LIMIT}?
+--ro dlf-bcast-value              ipi-if-types:if_rate_limit_t
+--ro dlf-bcast-rate-limit-format  ipi-if-types:if_rate_limit_type
+--ro dlf-bcast-burst-value        uint32
+--ro hardware-applied-dlf-bcast-value? decimal64 {feature-list:HAVE_BROADCOM,feature-
list:HAVE_RATE_LIMIT}?
augment /ipi-interface:interfaces/ipi-interface:interface/ipi-interface:state:
+--ro custom-state
+--ro current-bandwidth?  uint64
augment /ipi-interface:interfaces/ipi-interface:interface/ipi-interface:state/ipi-interface:counters:
+--ro extended-counters
+--ro in-compressed?      yang:counter64
+--ro out-compressed?     yang:counter64
+--ro collisions?         yang:counter64
+--ro unicast-rpf-discard? yang:counter64
+--ro in-length-errors?   yang:counter64
+--ro in-oversize-errors? yang:counter64
+--ro in-crc-errors?      yang:counter64
+--ro in-frame-errors?    yang:counter64
+--ro in-fifo-errors?     yang:counter64
+--ro in-missed-errors?   yang:counter64
+--ro out-aborted-errors? yang:counter64
+--ro out-carrier-errors? yang:counter64
+--ro out-fifo-errors?    yang:counter64

```

```

+--ro out-heartbeat-errors? yang:counter64
+--ro out-window-errors?   yang:counter64
+--ro l2-protocol-pkt-stat* [l2cp-counter-type] {feature-list:HAVE_HAL,feature-list:HAVE_BROADCOM}?
| +--ro lacp-counters?     yang:counter64
| +--ro stp-counters?     yang:counter64
| +--ro lldp-counters?    yang:counter64
| +--ro efmCounters?      yang:counter64
| +--ro elmi-counters?    yang:counter64
| +--ro dot1x-counters?   yang:counter64
| +--ro synce-counters?   yang:counter64
| +--ro l2cp-counter-type ipi-if-types:if_l2cp_stats_process_t
+--ro error-disable-reason? ipi-if-types:if_errdisable_state_t

augment /ipi-interface:interfaces/ipi-interface:interface/ipi-if-ethernet:ethernet/ipi-if-ethernet:state/ipi-if-ethernet:counters:

+--ro extended-ethernet-counters {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-list:NOT_HAVE_SWFWDR,feature-list:NOT_HAVE_POND}?
+--ro protocol-pkt-stats {feature-list:HAVE_HAL,feature-list:HAVE_BROADCOM}?
| +--ro in-bgp-pkts?      yang:counter32
| +--ro in-ospf-pkts?    yang:counter32
| +--ro in-isis-pkts?    yang:counter32
| +--ro in-ldp-rsvp-pkts? yang:counter32
| +--ro in-arp-pkts?     yang:counter32
| +--ro in-evpn-pkts?    yang:counter32
| +--ro in-igmp-pkts?    yang:counter32
| +--ro in-pim-pkts?     yang:counter32
| +--ro in-total-pkts?   yang:counter32
+--ro in-good-octets?     yang:counter64
+--ro in-bad-octets?      yang:counter64
+--ro mac-transmit-error? yang:counter64
+--ro in-good-pkts?       yang:counter64
+--ro in-bad-pkts?        yang:counter64
+--ro out-good-octets?    yang:counter64
+--ro out-good-pkts?     yang:counter64
+--ro excessive-collisions? yang:counter64
+--ro in-unrecognized-mac-control? yang:counter64
+--ro drop-events?       yang:counter64
+--ro in-mac-errors?     yang:counter64

```

```

+--ro in-dribble-errors?      yang:counter64
+--ro collisions-state?      yang:counter64
+--ro late-collisions?       yang:counter64
+--ro deferred-tx?           yang:counter64
+--ro mtu-exceed-discards?   yang:counter64
+--ro in-jumbo-frames?       yang:counter64
+--ro out-jumbo-frames?      yang:counter64
+--ro receive-pkt-rate?      yang:counter64
+--ro receive-bit-rate?      yang:counter64
+--ro send-pkt-rate?         yang:counter64
+--ro send-bit-rate?         yang:counter64

```

augment /ipi-interface:interfaces:

```

+--rw global
+--rw error-disable
+--rw config
| +--rw reason?              ipi-if-types:if_err_reason_t
| +--rw error-disable-stp-bpdu-guard?  boolean
| +--rw timeout-interval?      uint32 {feature-list:HAVE_L2}?
| +--rw link-flap-max-count?    uint32 {feature-list:HAVE_L2}?
| +--rw link-flap-timer-interval?  uint32 {feature-list:HAVE_L2}?
| +--rw mac-move-limit?        uint32 {feature-list:HAVE_L2}?
| +--rw storm-control-max-count?  uint32 {feature-list:HAVE_RATE_LIMIT}?
| +--rw storm-control-timer-interval? uint32 {feature-list:HAVE_RATE_LIMIT}?
+--ro state
+--ro reason?                ipi-if-types:if_err_reason_t
+--ro error-disable-stp-bpdu-guard?  boolean
+--ro timeout-interval?          uint32 {feature-list:HAVE_L2}?
+--ro link-flap-max-count?        uint32 {feature-list:HAVE_L2}?
+--ro link-flap-timer-interval?    uint32 {feature-list:HAVE_L2}?
+--ro mac-move-limit?            uint32 {feature-list:HAVE_L2}?
+--ro storm-control-max-count?     uint32 {feature-list:HAVE_RATE_LIMIT}?
+--ro storm-control-timer-interval? uint32 {feature-list:HAVE_RATE_LIMIT}?
+--ro default-link-flap-count?     uint32
+--ro default-link-flap-timer-interval?  uint32
+--ro default-storm-control-max-count?  uint32 {feature-list:HAVE_RATE_LIMIT}?
+--ro default-storm-control-timer-interval? uint32 {feature-list:HAVE_RATE_LIMIT}?

```

```

+--ro link-flap-status?          ipi-if-types:if_errdis_status_t
+--ro storm-control-status?      ipi-if-types:if_errdis_status_t
+--ro lag-mismatch-status?       ipi-if-types:if_errdis_status_t
+--ro stp-bpdu-guard-status?     ipi-if-types:if_errdis_status_t
+--ro mac-move-limit-status?     ipi-if-types:if_errdis_status_t

```

augment /ipi-interface:interfaces/ipi-interface:interface:

```

+--rw tunnel {feature-list:HAVE_TUNNEL}?
  +--rw config
    | +--rw mode?          ipi-if-types:if_tunnel_mode_t
    | +--rw src?           inet:ipv4-address
    | +--rw multicast-interface? string {feature-list:HAVE_VXLAN}?
    | +--rw dst?           inet:ipv4-address
    | +--rw checksum-enable? empty
    | +--rw tos-byte?      uint16
    | +--rw ttl?           uint16
    | +--rw path-mtu-enable? empty
    | +--rw dst-mac-address? string {feature-list:HAVE_USER_HSL}?
    | +--rw gre-key?       ipi-if-types:if_tunnel_key_t {feature-list:HAVE_GRE_KEY}?
  +--ro state
    +--ro mode?          ipi-if-types:if_tunnel_mode_t
    +--ro src?           inet:ipv4-address
    +--ro multicast-interface? string {feature-list:HAVE_VXLAN}?
    +--ro dst?           inet:ipv4-address
    +--ro checksum-enable? empty
    +--ro tos-byte?      uint16
    +--ro ttl?           uint16
    +--ro path-mtu-enable? empty
    +--ro dst-mac-address? string {feature-list:HAVE_USER_HSL}?
    +--ro gre-key?       ipi-if-types:if_tunnel_key_t {feature-list:HAVE_GRE_KEY}?

```

rpcs:

```

+---x clear-interface-forward-error-correction-counters
| +---w input
|   +---w if-name string
+---x clear-interface-error-disable
  +---w input

```

+---w if-name string

notifications:

```
+---n interface-error-disable-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro error-disable-reason? ipi-if-types:if_errdisable_state_t
+---n interface-bandwidth-start
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro current-bandwidth? uint64
+---n interface-bandwidth-upgrade
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro current-bandwidth? uint64
+---n interface-bandwidth-downgrade
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro current-bandwidth? uint64
+---n interface-bandwidth-close
  +--ro severity?      cml-data-types:cml_notif_severity_t
  +--ro eventClass?    cml-data-types:cml_notif_class_t
  +--ro name?          string
  +--ro current-bandwidth? uint64
```

---

## module: ipi-if-ip

```
+--rw ip-global
  +--rw vrf* [vrf-name] {feature-list:HAVE_VRF}?
    | +--rw vrf-name -> ../config/vrf-name
    | +--rw config
```

```

| | +--rw vrf-name?                -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| | +--rw disable-ip-vrf-forwarding?  empty
| | +--rw disable-ipv6-vrf-forwarding? empty {feature-list:HAVE_IPV6}?
| | +--rw enable-icmp-broadcast?      empty
| +--ro state
| +--ro vrf-name?                  -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| +--ro disable-ip-vrf-forwarding?  empty
| +--ro disable-ipv6-vrf-forwarding? empty {feature-list:HAVE_IPV6}?
| +--ro enable-icmp-broadcast?      empty
+--rw config
| +--rw router-id?                 string
| +--rw enable-auto-router-id-selection?  empty
| +--rw disable-ip-forwarding?          empty
| +--rw disable-ipv6-forwarding?         empty {feature-list:HAVE_IPV6}?
| +--rw default-vrf-enable-icmp-broadcast? empty
+--ro state
+--ro router-id?                     string
+--ro enable-auto-router-id-selection?  empty
+--ro disable-ip-forwarding?           empty
+--ro disable-ipv6-forwarding?         empty {feature-list:HAVE_IPV6}?
+--ro default-vrf-enable-icmp-broadcast? empty

```

augment /ipi-interface:interfaces/ipi-interface:interface:

```

+--rw ipv4
+--rw secondary-addresses* [ip-address]
| +--rw ip-address  -> ../config/ip-address
| +--rw config
| | +--rw ip-address?    cml-data-types:cml_ipv4_prefix_t
| | +--rw ip-label?     cml-data-types:cml_line_t
| | +--rw secondary-anycast?  empty
| +--ro state
| +--ro ip-address?       cml-data-types:cml_ipv4_prefix_t
| +--ro ip-label?        cml-data-types:cml_line_t
| +--ro secondary-anycast?  empty
+--rw config

```



---

```

| +--rw primary-ip-addr?      cml-data-types:cml_ipv4_prefix_t
| +--rw enable-dhcp-ip-address? empty {feature-list:HAVE_DHCP_CLIENT}?
| +--rw prefix-length?       uint8
| +--rw ip-addr-label?       cml-data-types:cml_line_t
| +--rw ipv4-unnumbered-if-name? string {feature-list:HAVE_NSM_IF_UNNUMBERED}?
| +--rw remote-address?      string {feature-list:HAVE_NSM_IF_UNNUMBERED}?
| +--rw primary-anycast?     empty
+--ro state
  +--ro primary-ip-addr?      cml-data-types:cml_ipv4_prefix_t
  +--ro enable-dhcp-ip-address? empty {feature-list:HAVE_DHCP_CLIENT}?
  +--ro prefix-length?       uint8
  +--ro ip-addr-label?       cml-data-types:cml_line_t
  +--ro ipv4-unnumbered-if-name? string {feature-list:HAVE_NSM_IF_UNNUMBERED}?
  +--ro remote-address?      string {feature-list:HAVE_NSM_IF_UNNUMBERED}?
  +--ro primary-anycast?     empty
  +--ro dhcp-ip-address?      cml-data-types:cml_ipv4_prefix_t {feature-list:HAVE_DHCP_CLIENT}?
  +--ro ipv4-enabled-status?  boolean
augment /ipi-interface:interfaces/ipi-interface:interface:
+--rw ipv6 {feature-list:HAVE_IPV6}?
  +--rw addresses* [ipv6-address] {feature-list:HAVE_IPV6}?
  | +--rw ipv6-address -> ../config/ipv6-address
  | +--rw config
  | | +--rw ipv6-address? cml-data-types:cml_ipv6_prefix_t
  | | +--rw anycast?     empty
  | +--ro state
  |   +--ro ipv6-address? cml-data-types:cml_ipv6_prefix_t
  |   +--ro anycast?     empty
  +--rw config
  | +--rw ipv6-unnumbered-if-name? string {feature-list:HAVE_NSM_IF_UNNUMBERED,feature-
list:HAVE_IPV6}?
  | +--rw enable-dhcp-ipv6-address? empty {feature-list:HAVE_DHCP_CLIENT}?
  | +--rw enable-dhcp-temporary-ipv6-address? empty {feature-list:HAVE_DHCP_CLIENT}?
  | +--rw dhcp-address-prefix-length? uint8 {feature-list:HAVE_DHCP_CLIENT}?
  | +--rw enable-auto-config?        boolean {feature-list:HAVE_IPV6}?
  | +--rw max-autoconfig-address?    uint8
  +--ro state

```

---

---

```

| +--ro ipv6-unnumbered-if-name?      string {feature-list:HAVE_NSM_IF_UNNUMBERED,feature-
list:HAVE_IPV6}?
| +--ro enable-dhcp-ipv6-address?      empty {feature-list:HAVE_DHCP_CLIENT}?
| +--ro enable-dhcp-temporary-ipv6-address? empty {feature-list:HAVE_DHCP_CLIENT}?
| +--ro dhcp-address-prefix-length?    uint8 {feature-list:HAVE_DHCP_CLIENT}?
| +--ro enable-auto-config?            boolean {feature-list:HAVE_IPV6}?
| +--ro max-autoconfig-address?        uint8
| +--ro dhcp-ipv6-address?             cml-data-types:cml_ipv6_prefix_t {feature-list:HAVE_DHCP_CLIENT}?
| +--ro forwarding-status?             boolean {feature-list:HAVE_IPV6}?
+--ro auto-addresses {feature-list:HAVE_IPV6}?
  +--ro auto-address* [ipv6-address]
    +--ro ipv6-address -> ../state/ipv6-address
    +--ro state
      +--ro ipv6-address? cml-data-types:cml_ipv6_prefix_t
      +--ro anycast?      empty
      +--ro virtual?      empty
      +--ro vrrp?         empty {feature-list:HAVE_VRRP_V3}?

```

---

## module: ipi-igmp-snooping

```

+--rw igmp-snooping
  +--rw global
    | +--rw config
    | | +--rw disable-igmp-snooping?      empty
    | | +--rw disable-report-suppression? empty
    | | +--rw unknown-multicast-action?    ipi-igmp-snooping-types:igmp_snoop_unknown_mcast_action_t
    | +--ro state
    | +--ro disable-igmp-snooping?      empty
    | +--ro disable-report-suppression? empty
    | +--ro unknown-multicast-action?    ipi-igmp-snooping-types:igmp_snoop_unknown_mcast_action_t
  +--rw debug
    | +--rw config

```

---

```

| | +--rw options? ipi-igmp-snooping-types:igmp_snoop_debug_options_t
| +--ro state
|   +--ro options? ipi-igmp-snooping-types:igmp_snoop_debug_options_t
|   +--ro terminal-debug-status? ipi-igmp-snooping-types:igmp_snoop_debug_options_t
+--rw interfaces
  +--rw interface* [name]
    +--rw name -> ../config/name
    +--rw config
      | +--rw name? -> /ipi-interface:interfaces/interface/name
      | +--rw igmp-snooping? cml-data-types:cml_enable_disable_t
      | +--rw enable-fast-leave? empty
      | +--rw report-suppression? cml-data-types:cml_enable_disable_t
      | +--rw mrouter-interface-name* -> /ipi-interface:interfaces/interface/name
      | +--rw enable-querier? empty
    +--ro state
      | +--ro name? -> /ipi-interface:interfaces/interface/name
      | +--ro igmp-snooping? cml-data-types:cml_enable_disable_t
      | +--ro enable-fast-leave? empty
      | +--ro report-suppression? cml-data-types:cml_enable_disable_t
      | +--ro mrouter-interface-name* -> /ipi-interface:interfaces/interface/name
      | +--ro enable-querier? empty
    +--rw static-groups
      +--rw ssm-groups
        | +--rw ssm-group* [group-address source-address interface-name]
        |   +--rw group-address -> ../config/group-address
        |   +--rw source-address -> ../config/source-address
        |   +--rw interface-name -> ../config/interface-name
        |   +--rw config
        |     | +--rw group-address? inet:ipv4-address
        |     | +--rw interface-name? string
        |     | +--rw source-address? inet:ipv4-address
        |     +--ro state
        |       +--ro group-address? inet:ipv4-address
        |       +--ro interface-name? string
        |       +--ro source-address? inet:ipv4-address
      +--rw asm-groups

```

---

```

+--rw asm-group* [group-address interface-name]
  +--rw group-address  -> ../config/group-address
  +--rw interface-name -> ../config/interface-name
  +--rw config
    | +--rw group-address?  inet:ipv4-address
    | +--rw interface-name? string
  +--ro state
    +--ro group-address?  inet:ipv4-address
    +--ro interface-name? string

```

rpcs:

```

+---x igmp-snooping-clear-group-interface {feature-list:HAVE_L2MRIBD}?
| +---w input
|   +---w group-address  inet:ipv4-address
|   +---w interface-name string
+---x igmp-snooping-clear-interface {feature-list:HAVE_L2MRIBD}?
| +---w input
|   +---w interface-name string
+---x igmp-snooping-clear-all {feature-list:HAVE_L2MRIBD}?
+---x igmp-snooping-clear-group {feature-list:HAVE_L2MRIBD}?
| +---w input
|   +---w group-address  inet:ipv4-address
+---x igmp-snooping-terminal-debug-on {feature-list:HAVE_L2MRIBD}?
| +---w input
|   +---w terminal-debug-options  ipi-igmp-snooping-types:igmp_snoop_debug_options_t
+---x igmp-snooping-terminal-debug-off {feature-list:HAVE_L2MRIBD}?
  +---w input
    +---w terminal-debug-options  ipi-igmp-snooping-types:igmp_snoop_debug_options_t

```

---

## module: ipi-igmp

```

+--rw igmp
  +--rw vrfs
    | +--rw vrf* [vrf-name]
    |   +--rw vrf-name          -> ../config/vrf-name

```

---

```

|   +--rw config
|   |   +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
|   |   +--rw disable-ssm-map?  empty
|   |   +--rw disable-tos-check? empty
|   +--ro state
|   |   +--ro vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
|   |   +--ro disable-ssm-map?  empty
|   |   +--ro disable-tos-check? empty
|   +--rw group-membership-control
|   |   +--rw config
|   |   |   +--rw member-limit?      uint32
|   |   |   +--rw limit-exception-acl? string
|   |   +--ro state
|   |   |   +--ro member-limit?      uint32
|   |   |   +--ro limit-exception-acl? string
|   |   |   +--ro current-states-count? uint32
|   +--rw ssm
|   |   +--rw static-mappings
|   |   |   +--rw static-mapping* [group-ranges-acl source]
|   |   |   |   +--rw group-ranges-acl  -> ../config/group-ranges-acl
|   |   |   |   +--rw source            -> ../config/source
|   |   |   |   +--rw config
|   |   |   |   |   +--rw group-ranges-acl? string
|   |   |   |   |   +--rw source?        inet:ipv4-address
|   |   |   +--ro state
|   |   |   |   +--ro group-ranges-acl? string
|   |   |   |   +--ro source?            inet:ipv4-address
|   +--rw debug
|   |   +--rw config
|   |   |   +--rw options? ipi-igmp-types:igmp_debug_options_t
|   |   +--ro state
|   |   |   +--ro options? ipi-igmp-types:igmp_debug_options_t
|   |   |   +--ro terminal-debug-status? ipi-igmp-types:igmp_debug_options_t
+--rw interfaces
|   +--rw interface* [name]
|   |   +--rw name            -> ../config/name

```

---

```

|   +--rw config
|   |   +--rw name?          -> /ipi-interface:interfaces/interface/name
|   |   +--rw enabled?       empty
|   |   +--rw last-member-query-count?   uint8
|   |   +--rw last-member-query-interval? uint16
|   |   +--rw querier-timeout?   uint16
|   |   +--rw query-interval?    uint16
|   |   +--rw query-max-response-time?  uint8
|   |   +--rw startup-query-interval?  uint16
|   |   +--rw startup-query-count?    uint8
|   |   +--rw robustness-variable?    uint8
|   |   +--rw version?              uint8
|   |   +--rw require-router-alert-option? empty
|   |   +--rw allow-offlink-host?     empty
|   +--ro state
|   |   +--ro counters
|   |   |   +--ro v1-reports-received? yang:counter32
|   |   |   +--ro v2-reports-received? yang:counter32
|   |   |   +--ro v2-leaves-received?  yang:counter32
|   |   |   +--ro v3-reports-received? yang:counter32
|   |   |   +--ro current-group-records? yang:counter32
|   |   +--ro internet-address?        inet:ipv4-address
|   |   +--ro oper-status?              ipi-igmp-types:igmp_if_oper_status_t
|   |   +--ro host-version?             uint8
|   |   +--ro is-querier?               boolean
|   |   +--ro querying-router?          inet:ipv4-address
|   |   +--ro group-membership-interval? uint32
|   |   +--ro name?                    -> /ipi-interface:interfaces/interface/name
|   |   +--ro enabled?                 empty
|   |   +--ro last-member-query-count?  uint8
|   |   +--ro last-member-query-interval? uint16
|   |   +--ro querier-timeout?          uint16
|   |   +--ro query-interval?          uint16
|   |   +--ro query-max-response-time?  uint8
|   |   +--ro startup-query-interval?    uint16
|   |   +--ro startup-query-count?      uint8

```

---

```

| | +--ro robustness-variable?      uint8
| | +--ro version?                  uint8
| | +--ro require-router-alert-option? empty
| | +--ro allow-offlink-host?       empty
| +--rw proxy
| | +--rw config
| | | +--rw enable-proxy-service?    empty
| | | +--rw mroute-proxy-interface?  string
| | | +--rw unsolicited-report-interval? uint16
| | +--ro state
| |   +--ro enable-proxy-service?    empty
| |   +--ro mroute-proxy-interface?  string
| |   +--ro unsolicited-report-interval? uint16
| |   +--ro oper-status?             ipi-igmp-types:igmp_proxy_if_oper_status_t
| +--rw group-membership-control
| | +--rw config
| | | +--rw access-group-name?       string
| | | +--rw immediate-leave-groups-list? string
| | | +--rw member-limit?            uint32
| | | +--rw limit-exception-acl?     string
| | +--ro state
| |   +--ro access-group-name?       string
| |   +--ro immediate-leave-groups-list? string
| |   +--ro member-limit?            uint32
| |   +--ro limit-exception-acl?     string
| +--rw asm-static-groups
| | +--rw asm-static-group* [group-address]
| |   +--rw group-address -> ../config/group-address
| |   +--rw config
| |     +--rw group-address? inet:ipv4-address
| |   +--ro state
| |     +--ro group-address? inet:ipv4-address
| +--rw ssm-static-groups
| | +--rw ssm-static-group* [group-address source]
| |   +--rw group-address -> ../config/group-address
| |   +--rw source -> ../config/source

```

---

---

```

| | +--rw config
| | | +--rw group-address? inet:ipv4-address
| | | +--rw source?      ipi-igmp-types:igmp_static_ssm_source_t
| | +--ro state
| |   +--ro group-address? inet:ipv4-address
| |   +--ro source?      ipi-igmp-types:igmp_static_ssm_source_t
| +--rw asm-join-groups
| | +--rw asm-join-group* [group-address]
| | +--rw group-address -> ../config/group-address
| | +--rw config
| | | +--rw group-address? inet:ipv4-address
| | | +--ro state
| | |   +--ro group-address? inet:ipv4-address
| +--rw ssm-join-groups
| | +--rw ssm-join-group* [group-address source]
| |   +--rw group-address -> ../config/group-address
| |   +--rw source      -> ../config/source
| |   +--rw config
| | | +--rw group-address? inet:ipv4-address
| | | +--rw source?      inet:ipv4-address
| | +--ro state
| |   +--ro group-address? inet:ipv4-address
| |   +--ro source?      inet:ipv4-address
+--ro group-membership-tree
+--ro igmp-instances
+--ro igmp-instance* [vrf-name]
+--ro vrf-name -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
+--ro interfaces
+--ro interface* [if-name]
+--ro if-name -> /ipi-interface:interfaces/interface/name
+--ro member-groups
| +--ro member-group* [group-address]
| +--ro group-address -> ../state/group-address
| +--ro state
| | +--ro group-address? inet:ipv4-address
| | +--ro dynamic-remote? empty

```

---



---

```
| | +--ro static-group?  empty
| | +--ro local?        empty
| | +--ro ssm-mapped?   empty
| | +--ro static-source? empty
| | +--ro up-time?      string
| | +--ro group-mode?   ipi-igmp-types:igmp_ssm_group_mode_t
| | +--ro expiry?       string
| | +--ro last-reporter? inet:ipv4-address
| +--ro include-sources
| | +--ro include-source* [source-address]
| |   +--ro source-address -> ../state/source-address
| |   +--ro state
| |     +--ro source-address? inet:ipv4-address
| |     +--ro dynamic-remote? empty
| |     +--ro static-source?  empty
| |     +--ro local?          empty
| |     +--ro ssm-mapped?     empty
| |     +--ro up-time?        string
| |     +--ro expiry?         string
| |     +--ro is-forwarded?   ipi-igmp-types:igmp_yes_no_t
| +--ro exclude-sources
| | +--ro exclude-source* [source-address]
| |   +--ro source-address -> ../state/source-address
| |   +--ro state
| |     +--ro source-address? inet:ipv4-address
| |     +--ro dynamic-remote? empty
| |     +--ro static-source?  empty
| |     +--ro local?          empty
| |     +--ro ssm-mapped?     empty
| |     +--ro up-time?        string
| |     +--ro expiry?         string
| |     +--ro is-forwarded?   ipi-igmp-types:igmp_yes_no_t
+--ro proxy-groups
  +--ro proxy-group* [group-address]
    +--ro group-address -> ../state/group-address
    +--ro state
```

---

```

+--ro group-address?    inet:ipv4-address
+--ro proxy-interface?  string
+--ro group-mode?       ipi-igmp-types:igmp_ssm_group_mode_t
+--ro state?            ipi-igmp-types:igmp_if_state_t
+--ro membership-state? ipi-igmp-types:igmp_proxy_grp_membership_state_t
+--ro multicast-sources* inet:ipv4-address

```

rpcs:

```

+---x igmp-terminal-debug-on {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options ipi-igmp-types:igmp_debug_options_t
+---x igmp-terminal-debug-off {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options ipi-igmp-types:igmp_debug_options_t
+---x igmp-clear-all-groups {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w clear-all     empty
+---x igmp-clear-group-on-interface {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w group-address  inet:ipv4-address
|   +---w if-name        string
+---x igmp-clear-all-groups-on-interface {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w if-name        string
+---x igmp-clear-group {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w group-address  inet:ipv4-address

```

---

## module: ipi-interface

```

+--rw interfaces
  +--rw interface* [name]
    +--rw name          -> ../config/name
    +--rw config
      | +--rw name?      string
      | +--rw enable-switchport? empty
      | +--rw vrf-name?  -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
      {feature-list:HAVE_VRF}?
      | +--rw vr-name?   string {feature-list:HAVE_VR}?
      | +--rw type?      ipi-if-types:if_iana_if_type_t
      | +--rw mtu?       uint32
      | +--rw allow-first-frame? empty {feature-list:NOT_HAVE_DUNE}?
      | +--rw dot1ad-ether-type? string {feature-list:HAVE_VLAN_STACK,feature-list:NOT_HAVE_SWFWDR}?
      | +--rw description? cml-data-types:cml_line_t
      | +--rw shutdown?   empty
    +--ro state
      | +--ro name?      string
      | +--ro enable-switchport? empty
      | +--ro vrf-name?  -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
      {feature-list:HAVE_VRF}?
      | +--ro vr-name?   string {feature-list:HAVE_VR}?
      | +--ro type?      ipi-if-types:if_iana_if_type_t
      | +--ro mtu?       uint32
      | +--ro allow-first-frame? empty {feature-list:NOT_HAVE_DUNE}?
      | +--ro dot1ad-ether-type? string {feature-list:HAVE_VLAN_STACK,feature-list:NOT_HAVE_SWFWDR}?
      | +--ro description? cml-data-types:cml_line_t
      | +--ro shutdown?   empty
      | +--ro ifindex?   uint32
      | +--ro admin-status? ipi-if-types:if_interface_admin_status_t
      | +--ro oper-status? ipi-if-types:if_interface_oper_status_t
      | +--ro last-change? yang:timeticks
      | +--ro logical?    boolean
      | +--ro counters
      |   +--ro in-octets? yang:counter64
      |   +--ro in-pkts?  yang:counter64

```

---

```

    |   +--ro in-unicast-pkts?   yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
    |   +--ro in-broadcast-pkts? yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
    |   +--ro in-multicast-pkts? yang:counter64
    |   +--ro in-discards?      yang:counter64
    |   +--ro in-errors?       yang:counter64
    |   +--ro in-fcs-errors?    yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
    |   +--ro out-octets?       yang:counter64
    |   +--ro out-pkts?        yang:counter64
    |   +--ro out-unicast-pkts? yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
    |   +--ro out-broadcast-pkts? yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
    |   +--ro out-multicast-pkts? yang:counter64 {feature-list:HAVE_BROADCOM,feature-list:HAVE_HAL,feature-
list:NOT_HAVE_SWFWDR}?
    |   +--ro out-discards?     yang:counter64
    |   +--ro out-errors?      yang:counter64
    |   +--ro last-clear?      ipi-if-types:if_last_clear_time_t
+--rw interface-loopback
+--rw config!
    | +--rw if-loopback      ipi-if-types:if_loopback_dir_type_t
    | +--rw if-loopback-level ipi-if-types:if_loopback_type_t
+--ro state
    +--ro if-loopback      ipi-if-types:if_loopback_dir_type_t
    +--ro if-loopback-level ipi-if-types:if_loopback_type_t

```

rpcs:

```

+---x clear-interface-counters
+---w input
+---w name  string

```

notifications:

```

+---n interface-link-state-change-notification
+--ro severity?  cml-data-types:cml_notif_severity_t
+--ro eventClass? cml-data-types:cml_notif_class_t
+--ro name?      string

```

```

+--ro oper-status?  ipi-if-types:if_interface_oper_status_t

```

---

## module: ipi-ip-sla

```

+--rw ip-sla
|   +--rw processes
|   |   +--rw process* [identifier]
|   |   |   +--rw identifier      -> ../config/identifier
|   |   |   +--rw config
|   |   |   |   +--rw identifier?  uint16
|   |   |   |   +--ro state
|   |   |   |   |   +--ro identifier?  uint16
|   |   |   |   +--ro ip-sla-statistics
|   |   |   |   |   +--ro state
|   |   |   |   |   |   +--ro start-time?      yang:date-and-time
|   |   |   |   |   |   +--ro elapsed-time?      uint64
|   |   |   |   |   |   +--ro packets-sent?      uint32
|   |   |   |   |   |   +--ro packets-received?   uint32
|   |   |   |   |   |   +--ro packets-lost?      decimal64
|   |   |   |   |   |   +--ro invalid-tests?     uint32
|   |   |   |   |   |   +--ro minimum-round-trip-delay?  uint64
|   |   |   |   |   |   +--ro maximum-round-trip-delay?  uint64
|   |   |   |   |   |   +--ro average-round-trip-delay?  uint64
|   |   |   +--rw icmp-echo-processes
|   |   |   |   +--rw icmp-echo-process* [host]
|   |   |   |   |   +--rw host      -> ../config/host
|   |   |   |   |   +--rw config
|   |   |   |   |   |   +--rw host?      ip_sla_hostname_t
|   |   |   |   |   |   +--rw source-interface?  string
|   |   |   |   |   |   +--rw frequency?      uint8
|   |   |   |   |   |   +--rw timeout?      uint16
|   |   |   |   |   |   +--rw threshold?     uint16
|   |   |   |   +--ro state
|   |   |   |   |   +--ro host?      ip_sla_hostname_t
|   |   |   |   |   +--ro source-interface?  string
|   |   |   |   |   +--ro frequency?      uint8

```

---

```

|      +--ro timeout?      uint16
|      +--ro threshold?    uint16
+--rw scheduled-processes
  +--rw scheduled-process* [scheduled-pid time-range-name]
    +--rw scheduled-pid    -> ../config/scheduled-pid
    +--rw time-range-name  -> ../config/time-range-name
    +--rw config
      | +--rw scheduled-pid?  uint16
      | +--rw time-range-name? string
      | +--rw vrf-name?      string
    +--ro state
      +--ro scheduled-pid?  uint16
      +--ro time-range-name? string
      +--ro vrf-name?      string

```

rpcs:

```

+---x ip-sla-clear-statistics {feature-list:HAVE_IPSLA,feature-list:HAVE_BFD}?
  +---w input
    +---w identifier  uint16

```

notifications:

```

+---n icmp-echo-threshold {feature-list:HAVE_IPSLA}?
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro host?      ip_sla_hostname_t
| +--ro identifier? uint16
| +--ro threshold? uint16
+---n icmp-echo-timeout {feature-list:HAVE_IPSLA}?
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro host?      ip_sla_hostname_t
| +--ro identifier? uint16
| +--ro timeout?   uint16
+---n icmp-echo-disconnect {feature-list:HAVE_IPSLA}?
  +--ro severity?  cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t

```

+--ro identifier? uint16

---

## module: ipi-ipsec

```
+--rw ipsec {feature-list:HAVE_IPSEC}?
  +--rw transform-sets
    | +--rw transform-set* [transform-set-name]
    |   +--rw transform-set-name -> ../config/transform-set-name
    |   +--rw config
    |     | +--rw transform-set-name? string
    |     | +--rw transform-set-mode? ipi-ipsec-types:ipsec_ts_mode_t
    |     +--ro state
    |       | +--ro transform-set-name? string
    |       | +--ro transform-set-mode? ipi-ipsec-types:ipsec_ts_mode_t
    |       | +--ro transform-set-protocol? ipi-ipsec-types:ipsec_ts_protocol_t
    |       +--rw ah-auth
    |         | +--rw config
    |         | | +--rw ah-authentication? ipi-ipsec-types:ipsec_ah_authentication_t
    |         | | +--ro state
    |         | |   +--ro ah-authentication? ipi-ipsec-types:ipsec_ah_authentication_t
    |         +--rw esp-auth
    |           +--rw config!
    |             | +--rw esp-authentication ipi-ipsec-types:ipsec_esp_authentication_t
    |             | +--rw esp-encryption ipi-ipsec-types:ipsec_esp_encryption_t
    |             +--ro state
    |               +--ro esp-authentication ipi-ipsec-types:ipsec_esp_authentication_t
    |               +--ro esp-encryption ipi-ipsec-types:ipsec_esp_encryption_t
  +--rw crypto-maps
    +--rw crypto-map* [name]
      +--rw name -> ../config/name
      +--rw config
        | +--rw name? string
        | +--rw sa-type ipi-ipsec-types:ipsec_sa_type_t
        +--ro state
```

---

```

| +--ro name?    string
| +--ro sa-type  ipi-ipsec-types:ipsec_sa_type_t
+--rw sessions
  +--rw session* [sequence-id]
    +--rw sequence-id    -> ../config/sequence-id
    +--rw config
      | +--rw sequence-id? uint16
    +--ro state
      | +--ro sequence-id? uint16
    +--rw transform-sets
      | +--rw transform-set* [transform-set-name]
      |   +--rw transform-set-name -> ../config/transform-set-name
      |   +--rw config
      |     | +--rw transform-set-name? -> /ipsec/transform-sets/transform-set/transform-set-name
      |     +--ro state
      |       +--ro transform-set-name? -> /ipsec/transform-sets/transform-set/transform-set-name
    +--rw peer-addresses
      | +--rw peer-address* [peer]
      |   +--rw peer    -> ../config/peer
      |   +--rw config
      |     | +--rw peer?  inet:ip-address
      |     | +--rw spi    ipi-ipsec-types:ipsec_peer_spi_t
      |     +--ro state
      |       +--ro peer?  inet:ip-address
      |       +--ro spi    ipi-ipsec-types:ipsec_peer_spi_t
    +--rw session-keys
      +--rw session-key* [direction protocol security-parameter-index]
        +--rw direction          -> ../config/direction
        +--rw protocol            -> ../config/protocol
        +--rw security-parameter-index -> ../config/security-parameter-index
        +--rw config
          | +--rw direction?          ipi-ipsec-types:ipsec_session_key_direction_t
          | +--rw protocol?           ipi-ipsec-types:ipsec_session_key_protocol_t
          | +--rw security-parameter-index? uint16
          | +--rw cipher              string
          | +--rw authentication-key  string

```

---



```

+--ro state
  +--ro direction?          ipi-ipsec-types:ipsec_session_key_direction_t
  +--ro protocol?           ipi-ipsec-types:ipsec_session_key_protocol_t
  +--ro security-parameter-index? uint16
  +--ro cipher               string
  +--ro authentication-key   string

```

---

## module: ipi-ipv6-router-adv

```

+--rw router-advertisement {feature-list:HAVE_RTADV}?
  +--rw interfaces
    +--rw interface* [name]
      +--rw name          -> ../config/name
      +--rw config
        | +--rw name?      -> /ipi-interface:interfaces/interface/name
        | +--rw suppress-ra?   empty
        | +--rw suppress-ra-mtu? empty
        | +--rw managed-flag?   empty
        | +--rw other-config-flag? empty
        | +--rw current-hop-limit? uint8
        | +--rw link-mtu?      uint32
        | +--rw dad-attempts?   uint16
        +--ro state
          | +--ro name?        -> /ipi-interface:interfaces/interface/name
          | +--ro suppress-ra?   empty
          | +--ro suppress-ra-mtu? empty
          | +--ro managed-flag?   empty
          | +--ro other-config-flag? empty
          | +--ro current-hop-limit? uint8
          | +--ro link-mtu?      uint32
          | +--ro dad-attempts?   uint16
          +--rw ipv6-prefixes
            +--rw config
              | +--rw off-link?      empty
              | +--rw no-auto-configuration? empty
              | +--rw valid-lifetime? uint32

```

---

```
| | +--rw preferred-lifetime?    uint32
| +--ro state
| | +--ro off-link?             empty
| | +--ro no-auto-configuration? empty
| | +--ro valid-lifetime?       uint32
| | +--ro preferred-lifetime?   uint32
| +--rw ipv6-prefix* [ipv6-address]
|   +--rw ipv6-address  -> ../config/ipv6-address
|   +--rw config
|     | +--rw ipv6-address?      cml-data-types:cml_ipv6_prefix_t
|     | +--rw valid-lifetime?    uint32
|     | +--rw preferred-lifetime? uint32
|     | +--rw off-link?         empty
|     | +--rw no-auto-configuration? empty
|     +--ro state
|       +--ro ipv6-address?      cml-data-types:cml_ipv6_prefix_t
|       +--ro valid-lifetime?    uint32
|       +--ro preferred-lifetime? uint32
|       +--ro off-link?         empty
|       +--ro no-auto-configuration? empty
+--rw timers
  +--rw config
    | +--rw reachable-time?      uint32
    | +--rw retransmission-time? uint32
    | +--rw router-lifetime?     uint16
  +--ro state
    | +--ro reachable-time?      uint32
    | +--ro retransmission-time? uint32
    | +--ro router-lifetime?     uint16
    | +--ro random-interval?     uint32
    | +--ro time-remaining?      uint32
  +--rw ra-interval
    +--rw config!
      | +--rw max-ra-interval    uint32
      | +--rw min-ra-interval    uint32
    +--ro state
```

---

```

+--ro max-ra-interval  uint32
+--ro min-ra-interval  uint32

```

---

## module: ipi-isis

```

+--rw isis
| +--rw isis-instances
| | +--rw isis-instance* [instance]
| | | +--rw instance          -> ../config/instance
| | | +--ro ipv4-route* [destination-prefix]
| | | | +--ro destination-prefix -> ../state/destination-prefix
| | | | +--ro nexthop* [nexthop-ip]
| | | | | +--ro nexthop-ip -> ../state/nexthop-ip
| | | | | +--ro state
| | | | | | +--ro nexthop-ip?      inet:ipv4-address
| | | | | | +--ro outgoing-interface? string
| | | | | | +--ro redistribute-map-tag? uint32
| | | | | | +--ro source-identifier? string
| | | | +--ro state
| | | | | +--ro destination-prefix?      cml-data-types:cml_ipv4_addr_prefix_t
| | | | | +--ro destination-path-metric?  uint32
| | | | | +--ro destination-path-type?    string
| | | | | +--ro is-destination-path-type-external? boolean
| | +--ro ipv6-route* [destination-prefix]
| | | +--ro destination-prefix -> ../state/destination-prefix
| | | +--ro nexthop* [nexthop-ip]
| | | | +--ro nexthop-ip -> ../state/nexthop-ip

```

---

```

| | | +--ro state
| | |   +--ro nexthop-ip?          inet:ipv6-address
| | |   +--ro outgoing-interface?  string
| | |   +--ro redistribute-map-tag? uint32
| | +--ro state
| |   +--ro destination-prefix?      cml-data-types:cml_ipv6_prefix_t
| |   +--ro destination-path-metric?  uint32
| |   +--ro destination-path-type?    string
| |   +--ro is-destination-path-type-external? boolean
| +--rw config
| | +--rw instance?                  string
| | +--rw distance?                  uint8
| | +--rw vrf-name                    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| |   +--rw dynamic-host-name?      ipi-isis-types:isis_dynamic_hostanme_t
| |   +--rw disable-adjacency-check? empty
| |   +--rw ignore-lsp-errors?       empty
| |   +--rw lfa-hold-timer?           int32 {feature-list:HAVE_ISIS_LFA}?
| |   +--rw level-capability?         ipi-isis-types:isis_is_type_t
| |   +--rw authentication-send-only? ipi-isis-types:isis_auth_level_type_t
| |   +--rw incremental-spf-levels?   ipi-isis-types:isis_is_type_t
| |   +--rw priority-tag?             uint32 {feature-list:HAVE_WIDE_METRIC}?
| |   +--rw disable-gr-capability?     empty {feature-list:HAVE_RESTART}?
| |   +--rw enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
| |   +--rw maximum-area-addresses?   uint8
| |   +--rw context-name?             string {feature-list:HAVE_SNMP}?
| |   +--rw disable-asla-usage-flex-algo? empty
| |   +--rw disable-asla-strict-flex-algo? empty
| |   +--rw disable-flex-algo-usage?  empty
| +--ro state
| | +--ro counters
| | | +--ro system-level-1-adjacency-count? uint32
| | | +--ro system-level-2-adjacency-count? uint32
| | | +--ro system-total-adjacency-count?   uint32
| | +--ro next-global-update-level-1?      uint32
| | +--ro next-global-update-level-2?      uint32
| | +--ro overload?                        ipi-isis-types:isis_overload_state_t

```

---

---

```

| | +--ro instance?          string
| | +--ro distance?         uint8
| | +--ro vrf-name          -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| | +--ro dynamic-host-name? ipi-isis-types:isis_dynamic_hostname_t
| | +--ro disable-adjacency-check? empty
| | +--ro ignore-lsp-errors?  empty
| | +--ro lfa-hold-timer?     int32 {feature-list:HAVE_ISIS_LFA}?
| | +--ro level-capability?   ipi-isis-types:isis_is_type_t
| | +--ro authentication-send-only? ipi-isis-types:isis_auth_level_type_t
| | +--ro incremental-spf-levels? ipi-isis-types:isis_is_type_t
| | +--ro priority-tag?       uint32 {feature-list:HAVE_WIDE_METRIC}?
| | +--ro disable-gr-capability? empty {feature-list:HAVE_RESTART}?
| | +--ro enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
| | +--ro maximum-area-addresses? uint8
| | +--ro context-name?       string {feature-list:HAVE_SNMP}?
| | +--ro disable-asla-usage-flex-algo? empty
| | +--ro disable-asla-strict-flex-algo? empty
| | +--ro disable-flex-algo-usage? empty
| +--ro vrf
| | +--ro igp-shortcut-lsp* [index]
| |   +--ro index  -> ../state/index
| |   +--ro state
| |     +--ro index?      uint32
| |     +--ro metric?     uint16
| |     +--ro tunnel-id?  uint32
| |     +--ro tunnel-endpoint? string
| |     +--ro lock?       uint16
| |     +--ro status?     ipi-isis-types:isis_igp_shortcut_lsp_status_t
| +--rw partial-route-computations
| | +--rw partial-route-computation* [minimum-delay maximum-delay]
| |   +--rw minimum-delay  -> ../config/minimum-delay
| |   +--rw maximum-delay  -> ../config/maximum-delay
| |   +--rw config
| |     | +--rw minimum-delay? uint32
| |     | +--rw maximum-delay? uint32
| |     +--ro state

```

---

---

```
| |    +--ro minimum-delay?  uint32
| |    +--ro maximum-delay?  uint32
| +--rw area-authentication
| | +--rw config!
| | | +--rw area-password      string
| | | +--rw sequence-number-packet?  ipi-isis-types:isis_snp_t
| | +--ro state
| |   +--ro area-password      string
| |   +--ro sequence-number-packet?  ipi-isis-types:isis_snp_t
| +--rw network-entity-title
| | +--rw config
| | | +--rw net*  string
| | +--ro state
| |   +--ro net*  string
| +--rw domain-authentication
| | +--rw config!
| | | +--rw domain-password  string
| | | +--rw domain-snp?     ipi-isis-types:isis_snp_t
| | +--ro state
| |   +--ro domain-password  string
| |   +--ro domain-snp?     ipi-isis-types:isis_snp_t
| +--rw metric {feature-list:HAVE_WIDE_METRIC}?
| | +--rw config
| | | +--rw style?          ipi-isis-types:isis_metric_style_t {feature-list:HAVE_WIDE_METRIC}?
| | | +--rw level-number?  ipi-isis-types:isis_level3_t {feature-list:HAVE_WIDE_METRIC}?
| | +--ro state
| |   +--ro style?          ipi-isis-types:isis_metric_style_t {feature-list:HAVE_WIDE_METRIC}?
| |   +--ro level-number?  ipi-isis-types:isis_level3_t {feature-list:HAVE_WIDE_METRIC}?
| +--rw manual-area-addresses
| | +--ro state
| |   +--ro address*  string
| +--rw receive-area-addresses
| | +--ro state
| |   +--ro address*  string
| +--rw timers
| | +--rw config
```

---

---

```

| | | +--rw lsp-refresh-interval? uint16
| | | +--rw lsp-lifetime-interval? uint16
| | +--ro state
| |   +--ro lsp-refresh-interval? uint16
| |   +--ro lsp-lifetime-interval? uint16
| +--rw traffic-engineering
| | +--rw config
| | +--ro state
| +--rw address-family-ipv6
| | +--rw level-1-into-2-redistributes
| | | +--rw redistribute-level-1-into-2* [enable]
| | |   +--rw enable -> ../config/enable
| | |   +--rw config
| | |     +--rw enable? empty
| | |     +--rw level-1-acl? string
| | |     +--ro state
| | |       +--ro enable? empty
| | |       +--ro level-1-acl? string
| | +--rw level-2-into-1-redistributes
| | | +--rw redistribute-level-2-into-1* [enable]
| | |   +--rw enable -> ../config/enable
| | |   +--rw config
| | |     +--rw enable? empty
| | |     +--rw level-2-acl? string
| | |     +--ro state
| | |       +--ro enable? empty
| | |       +--ro level-2-acl? string
| | +--rw default-route-informations
| | | +--rw default-route-information* [originate]
| | |   +--rw originate -> ../config/originate
| | |   +--rw config
| | |     +--rw originate? ipi-isis-types:isis_origin_type_t
| | |     +--rw route-map-name? string
| | |     +--ro state
| | |       +--ro originate? ipi-isis-types:isis_origin_type_t
| | |       +--ro route-map-name? string

```

---

```

| | +--rw config!
| | | +--rw afi-name          ipi-isis-types:isis_address_ipv6_t
| | | +--rw administrative-distance? uint32
| | | +--rw disable-adjacency-check? empty
| | +--ro state
| | | +--ro afi-name          ipi-isis-types:isis_address_ipv6_t
| | | +--ro administrative-distance? uint32
| | | +--ro disable-adjacency-check? empty
| | +--rw redistributions
| | | +--rw redistribute* [ipv6-protocol-type]
| | |   +--rw ipv6-protocol-type -> ../config/ipv6-protocol-type
| | |   +--rw config
| | |     | +--rw ipv6-protocol-type? ipi-isis-types:isis_redistribute_t
| | |     | +--rw ipv6-level?        ipi-isis-types:isis_is_type3_t
| | |     | +--rw ipv6-metric-value? uint32
| | |     | +--rw ipv6-metric-type?  ipi-isis-types:isis_metric_t
| | |     | +--rw ipv6-route-map?    string
| | |     +--ro state
| | |       +--ro ipv6-protocol-type? ipi-isis-types:isis_redistribute_t
| | |       +--ro ipv6-level?        ipi-isis-types:isis_is_type3_t
| | |       +--ro ipv6-metric-value? uint32
| | |       +--ro ipv6-metric-type?  ipi-isis-types:isis_metric_t
| | |       +--ro ipv6-route-map?    string
| | +--rw summary-prefixes
| | | +--rw summary-prefix* [prefix]
| | |   +--rw prefix -> ../config/prefix
| | |   +--rw config
| | |     | +--rw prefix? cml-data-types:cml_ipv6_prefix_t
| | |     | +--rw level   ipi-isis-types:isis_summary_level_t
| | |     | +--rw metric? uint8
| | |     +--ro state
| | |       +--ro prefix? cml-data-types:cml_ipv6_prefix_t
| | |       +--ro level   ipi-isis-types:isis_summary_level_t
| | |       +--ro metric? uint8
| | +--rw multi-topologies
| |   +--rw multi-topology* [level] {feature-list:HAVE_MULTI_TOPOLOGY}?

```



---

```

| |   +--rw level   -> ../config/level
| |   +--rw config
| |   | +--rw level?  ipi-isis-types:isis_multi_topology_level_type_t
| |   +--ro state
| |       +--ro level?  ipi-isis-types:isis_multi_topology_level_type_t
| +--rw distances
| | +--rw distance* [system-id]
| |   +--rw system-id   -> ../config/system-id
| |   +--rw config
| |   | +--rw system-id?   string
| |   | +--rw value        uint8
| |   | +--rw access-list-name?  string
| |   +--ro state
| |       +--ro system-id?   string
| |       +--ro value        uint8
| |       +--ro access-list-name?  string
| +--rw lsp-over-load
| | +--rw config!
| | | +--rw enabled        empty
| | | +--rw suppress-type?  ipi-isis-types:isis_suppress_t
| | | +--rw set-bit-on-boot? ipi-isis-types:isis_onstartup_t
| | +--ro state
| |   +--ro enabled        empty
| |   +--ro suppress-type?  ipi-isis-types:isis_suppress_t
| |   +--ro set-bit-on-boot? ipi-isis-types:isis_onstartup_t
| +--rw address-family-ipv4
| | +--ro state
| | | +--ro existence-state?   uint8
| | | +--ro redistribute-update?  int32
| | | +--ro redistribute-timer-value?  string
| | +--rw level-1-into-2-redistributes
| | | +--rw redistribute-level-1-into-2* [enable]
| | |   +--rw enable   -> ../config/enable
| | |   +--rw config
| | | | +--rw enable?   empty
| | | | +--rw level-1-acl?  string

```

---

```
| | | +--ro state
| | |   +--ro enable?    empty
| | |   +--ro level-1-acl? string
| | +--rw level-2-into-1-redistributes
| | | +--rw redistribute-level-2-into-1* [enable]
| | |   +--rw enable    -> ../config/enable
| | |   +--rw config
| | |     | +--rw enable?    empty
| | |     | +--rw level-2-acl? string
| | |     +--ro state
| | |       +--ro enable?    empty
| | |       +--ro level-2-acl? string
| | +--rw default-route-informations
| | | +--rw default-route-information* [originate]
| | |   +--rw originate    -> ../config/originate
| | |   +--rw config
| | |     | +--rw originate?    ipi-isis-types:isis_origin_type_t
| | |     | +--rw route-map-name? string
| | |     +--ro state
| | |       +--ro originate?    ipi-isis-types:isis_origin_type_t
| | |       +--ro route-map-name? string
| | +--rw redistributions
| | | +--rw redistribute* [protocol-type]
| | |   +--rw protocol-type    -> ../config/protocol-type
| | |   +--rw config
| | |     | +--rw protocol-type? ipi-isis-types:isis_redistribute_t
| | |     | +--rw level?        ipi-isis-types:isis_is_type3_t
| | |     | +--rw metric-value? uint32
| | |     | +--rw metric-type?  ipi-isis-types:isis_metric_t
| | |     | +--rw route-map?    string
| | |     +--ro state
| | |       +--ro protocol-type? ipi-isis-types:isis_redistribute_t
| | |       +--ro level?        ipi-isis-types:isis_is_type3_t
| | |       +--ro metric-value? uint32
| | |       +--ro metric-type?  ipi-isis-types:isis_metric_t
| | |       +--ro route-map?    string
```

---

```

| | +--rw summary-addresses
| | | +--rw summary-address* [prefix]
| | |   +--rw prefix  -> ../config/prefix
| | |   +--rw config
| | |     +--rw prefix?  cml-data-types:cml_ipv4_prefix_t
| | |     +--rw level    ipi-isis-types:isis_summary_level_t
| | |     +--rw metric?  uint8
| | |     +--ro state
| | |       +--ro prefix?  cml-data-types:cml_ipv4_prefix_t
| | |       +--ro level    ipi-isis-types:isis_summary_level_t
| | |       +--ro metric?  uint8
| | +--rw redistribute-isis-instances
| |   +--rw redistribute-isis-instance* [id]
| |     +--rw id      -> ../config/id
| |     +--rw config
| |       +--rw id?      string
| |       +--rw level?    ipi-isis-types:isis_is_type3_t
| |       +--rw metric-value?  uint32
| |       +--rw metric-type?  ipi-isis-types:isis_metric_t
| |       +--rw route-map?  string
| |       +--ro state
| |         +--ro id?      string
| |         +--ro level?    ipi-isis-types:isis_is_type3_t
| |         +--ro metric-value?  uint32
| |         +--ro metric-type?  ipi-isis-types:isis_metric_t
| |         +--ro route-map?  string
| +--rw passive-interfaces
| | +--rw config
| | | +--rw passive-interface-all?  empty
| | | +--ro state
| | | | +--ro passive-interface-all?  empty
| | | +--rw passive-interface* [name]
| | | | +--rw name      -> ../config/name
| | | | +--rw config
| | | | | +--rw name?  -> /ipi-interface:interfaces/interface/name
| | | | | +--ro state

```

---

---

```

| | | +--ro name? -> /ipi-interface:interfaces/interface/name
| | +--rw disable-passive-interfaces
| |   +--rw disable-passive-interface* [name]
| |     +--rw name -> ../config/name
| |     +--rw config
| |       | +--rw name? -> /ipi-interface:interfaces/interface/name
| |       +--ro state
| |         +--ro name? -> /ipi-interface:interfaces/interface/name
| +--rw microloop-avoidances {feature-list:HAVE_ISIS_LFA_OR_HAVE_ISIS_TI_LFA}?
| | +--rw microloop-avoidance* [level-type]
| |   +--rw level-type -> ../config/level-type
| |   +--rw config
| |     | +--rw hold-timer? uint8
| |     | +--rw max-fib?   uint8
| |     | +--rw level-type? ipi-isis-types:isis_level2_t
| |     | +--rw enable?    empty
| |     +--ro state
| |       +--ro hold-timer? uint8
| |       +--ro max-fib?   uint8
| |       +--ro level-type? ipi-isis-types:isis_level2_t
| |       +--ro enable?    empty
| +--rw mpls-traffic-engg
| | +--rw config
| | +--ro state
| +--ro extended-admin-groups
| | +--ro extended-admin-group* [name id]
| |   +--ro name -> ../state/name
| |   +--ro id -> ../state/id
| |   +--ro state
| |     +--ro name? string
| |     +--ro id?  uint16
| +--rw flexalgos
| | +--rw flexalgo* [algo-number]
| |   +--rw algo-number -> ../config/algo-number
| |   +--rw config!
| |     | +--rw algo-number? uint8

```

---

---

```

| | | +--rw metric-type?          ipi-isis-types:isis_fad_metric_type_t
| | | +--rw calculation-type?      ipi-isis-types:isis_fad_calculation_type_t
| | | +--rw priority?             uint8
| | | +--rw exclude-minimum-bandwidth?  string
| | | +--rw exclude-maximum-delay?      uint32
| | | +--rw enable-intf-group-mode-bw-calc?  empty
| | | +--rw reference-bandwidth?        string
| | | +--rw granularity-bandwidth?      string
| | | +--rw enable-advertise-definition?  empty
| | | +--rw enable-participate?         empty
| | | +--rw enable-fast-reroute?        empty
| | | +--rw enable-remote-lfa?         empty
| | | +--rw enable-ti-lfa?             empty
| | | +--rw enable-prefix-metric-flag?   empty
| | | +--rw fapm-metric?              uint8
| | | +--rw affinity-eag-exclude-any*    string
| | | +--rw affinity-eag-include-any*    string
| | | +--rw affinity-eag-include-all*   string
| | | +--rw affinity-eag-reverse-exclude-any*  string
| | | +--rw affinity-eag-reverse-include-any*  string
| | | +--rw affinity-eag-reverse-include-all*  string
| | | +--rw affinity-ag-exclude-any*      string
| | | +--rw affinity-ag-include-any*      string
| | | +--rw affinity-ag-include-all*     string
| | | +--rw affinity-ag-reverse-exclude-any*  string
| | | +--rw affinity-ag-reverse-include-any*  string
| | | +--rw affinity-ag-reverse-include-all*  string
| | +--ro state
| | | +--ro algo-number?            uint8
| | | +--ro metric-type?          ipi-isis-types:isis_fad_metric_type_t
| | | +--ro calculation-type?      ipi-isis-types:isis_fad_calculation_type_t
| | | +--ro priority?             uint8
| | | +--ro exclude-minimum-bandwidth?  string
| | | +--ro exclude-maximum-delay?      uint32
| | | +--ro enable-intf-group-mode-bw-calc?  empty
| | | +--ro reference-bandwidth?        string

```

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```

| | | +--ro granularity-bandwidth?      string
| | | +--ro enable-advertise-definition?  empty
| | | +--ro enable-participate?          empty
| | | +--ro enable-fast-reroute?         empty
| | | +--ro enable-remote-lfa?          empty
| | | +--ro enable-ti-lfa?              empty
| | | +--ro enable-prefix-metric-flag?   empty
| | | +--ro fapm-metric?                 uint8
| | | +--ro affinity-eag-exclude-any*     string
| | | +--ro affinity-eag-include-any*     string
| | | +--ro affinity-eag-include-all*    string
| | | +--ro affinity-eag-reverse-exclude-any* string
| | | +--ro affinity-eag-reverse-include-any* string
| | | +--ro affinity-eag-reverse-include-all* string
| | | +--ro affinity-ag-exclude-any*      string
| | | +--ro affinity-ag-include-any*      string
| | | +--ro affinity-ag-include-all*     string
| | | +--ro affinity-ag-reverse-exclude-any* string
| | | +--ro affinity-ag-reverse-include-any* string
| | | +--ro affinity-ag-reverse-include-all* string
| | +--rw flexalgo-bandwidth-thresholds
| | | +--rw flexalgo-bandwidth-threshold* [bandwidth-threshold]
| | |   +--rw bandwidth-threshold -> ../config/bandwidth-threshold
| | |   +--rw config
| | |     | +--rw bandwidth-threshold? string
| | |     | +--rw threshold-metric?   uint32
| | |     +--ro state
| | |       +--ro bandwidth-threshold? string
| | |       +--ro threshold-metric?   uint32
| | +--rw flexalgo-microloop-avoidances {feature-list:HAVE_ISIS_LFA_OR_HAVE_ISIS_TI_LFA}?
| |   +--rw flexalgo-microloop-avoidance* [level-type]
| |     +--rw level-type -> ../config/level-type
| |     +--rw config
| |       | +--rw level-type? ipi-isis-types:isis_level2_t
| |       | +--rw enable?    empty
| |       +--ro state

```

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```

| |      +--ro level-type?  ipi-isis-types:isis_level2_t
| |      +--ro enable?      empty
| +--ro level-runtime* [type]
| | +--ro type              -> ../state/type
| | +--ro lspdb* [lsp-identifier]
| | | +--ro lsp-identifier  -> ../state/lsp-identifier
| | | +--ro tlvs* [index]
| | | | +--ro index          -> ../state/index
| | | | +--ro is-neighbors* [system-id]
| | | | | +--ro system-id   -> ../state/system-id
| | | | | +--ro state
| | | | | +--ro system-id?  string
| | | | | +--ro metric?     uint32
| | | | +--ro es-neighbors* [system-id]
| | | | | +--ro system-id   -> ../state/system-id
| | | | | +--ro state
| | | | | +--ro system-id?  string
| | | | | +--ro metric?     uint32
| | | | +--ro ip-internal-reachability-information* [prefix]
| | | | | +--ro prefix      -> ../state/prefix
| | | | | +--ro state
| | | | | +--ro prefix?     cml-data-types:cml_line_t
| | | | | +--ro metric?     string
| | | | +--ro ip-external-reachability-information* [prefix]
| | | | | +--ro prefix      -> ../state/prefix
| | | | | +--ro state
| | | | | +--ro prefix?     cml-data-types:cml_line_t
| | | | | +--ro metric?     string
| | | | +--ro extended-is-reachability* [extended-is-index] {feature-list:HAVE_WIDE_METRIC}?
| | | | | +--ro extended-is-index  -> ../state/extended-is-index
| | | | | +--ro subtlv* [subtlv-index]
| | | | | | +--ro subtlv-index      -> ../state/subtlv-index
| | | | | | +--ro state
| | | | | | +--ro subtlv-index?    uint16
| | | | | | +--ro protocols-supported {feature-list:HAVE_PROTOCOL_TOPOLOGY}?
| | | | | | +--ro state

```

```

| | | | | +--ro nlp-id* ipi-isis-types:isis_level_proto_t
| | | | +--ro state
| | | | +--ro extended-isis-index? uint32
| | | | +--ro system-id? string
| | | | +--ro metric? uint32
| | | +--ro extended-ipv4-reachability* [ipv4-reach-index] {feature-list:HAVE_WIDE_METRIC}?
| | | | +--ro ipv4-reach-index -> ../state/ipv4-reach-index
| | | | +--ro stlv* [stlv-reach-index]
| | | | | +--ro stlv-reach-index -> ../state/stlv-reach-index
| | | | | +--ro state
| | | | | | +--ro stlv-reach-index? uint16
| | | | | | +--ro admin-tag-info
| | | | | | +--ro state
| | | | | | +--ro admin-tag? uint32
| | | | | | +--ro mismatch-length? uint16
| | | | | | +--ro state
| | | | | +--ro ipv4-reach-index? uint32
| | | | | +--ro prefix? cml-data-types:cml_ipv4_addr_prefix_t
| | | | | +--ro metric? uint32
| | | +--ro ipv6-reachability* [ipv6-reach-index] {feature-list:HAVE_IPV6}?
| | | | +--ro ipv6-reach-index -> ../state/ipv6-reach-index
| | | | +--ro stlv* [stlv-reach-index]
| | | | | +--ro stlv-reach-index -> ../state/stlv-reach-index
| | | | | +--ro state
| | | | | | +--ro stlv-reach-index? uint16
| | | | | | +--ro admin-tag-info
| | | | | | +--ro state
| | | | | | +--ro admin-tag? uint32
| | | | | | +--ro mismatch-length? uint16
| | | | | | +--ro state
| | | | | +--ro ipv6-reach-index? uint32
| | | | | +--ro prefix? cml-data-types:cml_ipv6_prefix_t
| | | | | +--ro metric? cml-data-types:cml_line_t
| | | | | +--ro up-down? boolean
| | | +--ro multi-topology* [id] {feature-list:HAVE_MULTI_TOPOLOGY}?
| | | | +--ro id -> ../state/id

```



```

| | | | +--ro state
| | | |   +--ro id?  string
| | | | +--ro multi-topology-is-reachability* [multi-is-index] {feature-list:HAVE_MULTI_TOPOLOGY}?
| | | | +--ro multi-is-index  -> ../state/multi-is-index
| | | | +--ro stlv* [stlv-index]
| | | |   +--ro stlv-index      -> ../state/stlv-index
| | | | +--ro state
| | | |   +--ro stlv-index?  uint16
| | | |   +--ro protocols-supported {feature-list:HAVE_PROTOCOL_TOPOLOGY}?
| | | |   +--ro state
| | | |     +--ro nlp-id*  ipi-isis-types:isis_level_proto_t
| | | | +--ro state
| | | |   +--ro multi-is-index?  uint32
| | | |   +--ro system-id?      string
| | | |   +--ro metric?         uint32
| | | | +--ro multi-topology-ipv6-reachability* [multi-ipv6-reach-index] {feature-
list:HAVE_MULTI_TOPOLOGY,feature-list:HAVE_IPV6}?
| | | | +--ro multi-ipv6-reach-index  -> ../state/multi-ipv6-reach-index
| | | | +--ro stlv* [stlv-reach-index]
| | | | +--ro stlv-reach-index  -> ../state/stlv-reach-index
| | | | +--ro state
| | | |   +--ro stlv-reach-index?  uint16
| | | |   +--ro admin-tag-info
| | | |   +--ro state
| | | |     +--ro admin-tag?      uint32
| | | |     +--ro mismatch-length?  uint16
| | | | +--ro state
| | | |   +--ro prefix?           string
| | | |   +--ro metric?           string
| | | |   +--ro up-down?          boolean
| | | |   +--ro multi-ipv6-reach-index?  uint16
| | | |   +--ro id?               uint16
| | | | +--ro multi-topology-ipv4-reachability* [id] {feature-list:HAVE_MULTI_TOPOLOGY}?
| | | | +--ro id  -> ../state/id
| | | | +--ro stlv* [stlv-reach-index]
| | | | +--ro stlv-reach-index  -> ../state/stlv-reach-index
| | | | +--ro state

```

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```

| | | | | +--ro stlv-reach-index? uint16
| | | | | +--ro admin-tag-info
| | | | | +--ro state
| | | | | +--ro admin-tag? uint32
| | | | | +--ro mismatch-length? uint16
| | | | +--ro state
| | | | +--ro prefix? inet:ipv4-address
| | | | +--ro metric? uint32
| | | | +--ro id? uint16
| | | +--ro state
| | | | +--ro index? uint32
| | | +--ro area-addresses
| | | | +--ro state
| | | | +--ro address* string
| | | +--ro supported-protocol
| | | | +--ro state
| | | | +--ro nlp-id* ipi-isis-types:isis_level_proto_t
| | | +--ro host-name
| | | | +--ro state
| | | | +--ro host-name? string
| | | +--ro ipv4-interface-addresses
| | | | +--ro state
| | | | +--ro address? inet:ipv4-address
| | | +--ro ipv6-interface-address {feature-list:HAVE_IPV6}?
| | | | +--ro state
| | | | +--ro address? inet:ipv6-address
| | | +--ro state
| | | +--ro lsp-identifier? string
| | | +--ro is-self-lsp? string
| | | +--ro checksum? string
| | | +--ro remaining-lifetime? uint16
| | | +--ro flags? uint8
| | | +--ro partition-repair? boolean
| | | +--ro over-loaded? boolean
| | | +--ro sequence-number? string
| | | +--ro pdu-length? uint32

```

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```

| | +--ro protocol-data* [index]
| | | +--ro index      uint8
| | | +--ro vertex* [destination-system-id]
| | |   +--ro destination-system-id -> ../state/destination-system-id
| | |   +--ro vertex-nexthop* [nexthop-interface nexthop-system-id]
| | |     | +--ro nexthop-interface -> ../state/nexthop-interface
| | |     | +--ro nexthop-system-id -> ../state/nexthop-system-id
| | |     | +--ro state
| | |     |   +--ro nexthop-interface? string
| | |     |   +--ro nexthop-system-id? string
| | |     |   +--ro snpa-mac-address?  cml-data-types:cml_mac_addr_t
| | |   +--ro state
| | |     +--ro distance?              uint32
| | |     +--ro destination-system-id? string
| | +--ro state
| |   +--ro counters
| | | +--ro authentication-type-fails?      uint32
| | | +--ro authentication-fails?          uint32
| | | +--ro corrupted-lsps?                uint32
| | | +--ro database-overloads?            uint32
| | | +--ro manual-address-drop-from-areas? uint32
| | | +--ro attempt-to-exceed-maximum-sequence-numbers? uint32
| | | +--ro sequence-number-skips?         uint32
| | | +--ro own-lsp-purges?                uint32
| | | +--ro lsp-sourced?                   uint32
| | | +--ro maximum-area-address-mismatches? uint32
| | | +--ro id-length-mismatch?            uint32
| | | +--ro partition-changes?            uint32
| | | +--ro spf-runs?                     uint32
| | | +--ro partial-route-calculation-count? uint32
| | | +--ro lan-designated-is-changes?     uint32
| | +--ro type?      ipi-isis-types:isis_level2_t
| | +--ro topology-type? uint8
| +--rw spf-levels
| | +--rw spf-level* [level]
| |   +--rw level      -> ../config/level

```

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```

| | +--rw spf-delays
| | | +--rw spf-delay* [spf-min-delay spf-max-delay]
| | |   +--rw spf-min-delay  -> ../config/spf-min-delay
| | |   +--rw spf-max-delay  -> ../config/spf-max-delay
| | |   +--rw config
| | |     | +--rw spf-min-delay?  uint32
| | |     | +--rw spf-max-delay?  uint32
| | |     +--ro state
| | |       +--ro spf-min-delay?  uint32
| | |       +--ro spf-max-delay?  uint32
| | +--rw config
| | | +--rw level?  ipi-isis-types:isis_level3_t
| | +--ro state
| |   +--ro level?  ipi-isis-types:isis_level3_t
| +--rw levels
| | +--rw level* [type]
| |   +--rw type      -> ../config/type
| |   +--rw config
| | | +--rw type?      ipi-isis-types:isis_level3_t
| | | +--rw wait-timer?  uint16
| | | +--rw restart-timer?  uint16
| | | +--rw lsp-max-wait-interval?  uint32
| | | +--rw lsp-mtu-size?   uint16
| | +--ro state
| | | +--ro type?      ipi-isis-types:isis_level3_t
| | | +--ro wait-timer?  uint16
| | | +--ro restart-timer?  uint16
| | | +--ro lsp-max-wait-interval?  uint32
| | | +--ro lsp-mtu-size?   uint16
| | +--rw authentication
| |   +--rw config!
| | | +--rw key-chain?  string
| | | +--rw mode      ipi-isis-types:isis_auth_mode_t
| | +--ro state
| |   +--ro key-chain?  string
| |   +--ro mode      ipi-isis-types:isis_auth_mode_t

```

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```

|   +--ro ipv4-lfa-route* [destination-prefix]
|   |   +--ro destination-prefix  -> ../state/destination-prefix
|   |   +--ro route-nexthop* [primary-nexthop nexthop-type]
|   |   |   +--ro primary-nexthop  -> ../state/primary-nexthop
|   |   |   +--ro nexthop-type     -> ../state/nexthop-type
|   |   |   +--ro state
|   |   |   |   +--ro primary-nexthop?          inet:ipv4-address
|   |   |   |   +--ro nexthop-type?            ipi-isis-types:isis_lfa_nexthop_type_t
|   |   |   |   +--ro primary-nexthop-interface-name? string
|   |   |   |   +--ro remote-router-id?        inet:ipv4-address
|   |   |   |   +--ro lfa-nexthop?            inet:ipv4-address
|   |   |   |   +--ro lfa-nexthop-interface-name? string
|   |   |   |   +--ro lfa-path-metric?        uint32
|   |   |   |   +--ro protection-provided?    cml-data-types:cml_line_t
|   |   |   +--ro state
|   |   |   |   +--ro destination-prefix?    cml-data-types:cml_ipv4_addr_prefix_t
|   |   |   |   +--ro destination-path-type? string
|   +--ro ipv6-lfa-route* [destination-prefix]
|   |   +--ro destination-prefix  -> ../state/destination-prefix
|   |   +--ro route-nexthop* [primary-nexthop]
|   |   |   +--ro primary-nexthop  -> ../state/primary-nexthop
|   |   |   +--ro state
|   |   |   |   +--ro primary-nexthop?          inet:ipv6-address
|   |   |   |   +--ro primary-nexthop-interface-name? string
|   |   |   |   +--ro lfa-nexthop?            inet:ipv6-address
|   |   |   |   +--ro lfa-nexthop-interface-name? string
|   |   |   |   +--ro lfa-path-metric?        uint32
|   |   |   |   +--ro protection-provided?    string
|   |   |   +--ro state
|   |   |   |   +--ro destination-prefix?    cml-data-types:cml_ipv6_prefix_t
|   |   |   |   +--ro destination-path-type? string
|   +--rw fast-reroute-levels
|   |   +--rw fast-reroute* [level-type]
|   |   |   +--rw level-type  -> ../config/level-type
|   |   |   +--rw config
|   |   |   |   +--rw level-type? ipi-isis-types:isis_level2_t

```

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```

|      +--ro state
|      | +--ro level-type? ipi-isis-types:isis_level2_t
|      +--rw route-maps
|      | +--rw route-map* [protocol] {feature-list:HAVE_ISIS_LFA}?
|      |   +--rw protocol -> ../config/protocol
|      |   +--rw config
|      |   | +--rw protocol? ipi-isis-types:isis_lfa_level_proto_t
|      |   | +--rw name? string
|      |   | +--rw enable-all-prefixes? ipi-isis-types:isis_frr_enum_t
|      |   +--ro state
|      |   | +--ro protocol? ipi-isis-types:isis_lfa_level_proto_t
|      |   | +--ro name? string
|      |   | +--ro enable-all-prefixes? ipi-isis-types:isis_frr_enum_t
|      +--rw ti-lfas
|      +--rw protocols
|      | +--rw protocol* [lfa-protocol preference-value] {feature-list:HAVE_ISIS_LFA}?
|      |   +--rw lfa-protocol -> ../config/lfa-protocol
|      |   +--rw preference-value -> ../config/preference-value
|      |   +--rw config
|      |   | +--rw lfa-protocol? ipi-isis-types:isis_lfa_level_proto_t
|      |   | +--rw preference-value? ipi-isis-types:isis_frr_tie_break_val_t
|      |   | +--rw preference-index uint32
|      |   +--ro state
|      |   | +--ro lfa-protocol? ipi-isis-types:isis_lfa_level_proto_t
|      |   | +--ro preference-value? ipi-isis-types:isis_frr_tie_break_val_t
|      |   | +--ro preference-index uint32
+--rw debug
| +--rw config
| | +--rw options? ipi-isis-types:isis_debug_t
| | +--rw enable-hello? empty
| | +--rw interface-hello* string
| | +--rw system-id-hello* string
| +--ro state
| +--ro options? ipi-isis-types:isis_debug_t
| +--ro enable-hello? empty
| +--ro interface-hello* string

```

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```

|   +--ro system-id-hello*  string
|   +--ro terminal-debug
|       +--ro terminal-debug-status?          ipi-isis-types:isis_debug_t
|       +--ro terminal-debug-status-hello?      cml-data-types:cml_on_off_t
|       +--ro terminal-debug-status-interface-hello*  string
|       +--ro terminal-debug-status-system-id-hello*  string
+--ro state
|   +--ro host-name*        string
|   +--ro lsp-identifier?    -> /isis/isis-instances/isis-instance/level-runtime/lspdb/state/lsp-identifier
|   +--ro overload?         -> /isis/isis-instances/isis-instance/state/overload
|   +--ro pdu-length?       -> /isis/isis-instances/isis-instance/level-runtime/lspdb/state/pdu-length
|   +--ro raw-pdu?          string
|   +--ro pdu-field-len?    uint8
|   +--ro max-area-addresses? uint8
|   +--ro protocol-version?  uint8
|   +--ro reason?           string
|   +--ro protocols?        uint8
|   +--ro error-offset?     uint32
|   +--ro tlv-type?         uint8
+--rw graceful-restart
|   +--rw config
|   |   +--rw grace-period?    uint16
|   |   +--rw enable-helper-only?  empty
|   |   +--rw suppress-adjacency?  empty
|   +--ro state
|   |   +--ro grace-period?    uint16
|   |   +--ro enable-helper-only?  empty
|   |   +--ro suppress-adjacency?  empty
+--rw interfaces
  +--rw interface* [name]
    +--rw name          -> ../config/name
    +--ro bandwidth-priority* [priority]
    |   +--ro priority  -> ../state/priority
    |   +--ro state
    |       +--ro priority?      uint8
    |       +--ro available-bandwidth?  string

```

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```

+--ro neighbor-lan* [system-id]
| +--ro system-id      -> ../state/system-id
| +--ro adjacency* [level]
| | +--ro level  -> ../state/level
| | +--ro state
| |   +--ro level?          ipi-isis-types:isis_level_t
| |   +--ro adjacency-state? ipi-isis-types:isis_state_t
| |   +--ro adjacency-id?   uint32
| |   +--ro remaining-hold-time? string
| |   +--ro priority?      uint8
| +--ro state
| | +--ro system-id?      string
| | +--ro adjacency-type? ipi-isis-types:isis_level_t
| | +--ro adjacency-advertisement? ipi-isis-types:isis_nbr_adj_t
| | +--ro neighbor-snpa?  string
| | +--ro level-1-nlp-id* ipi-isis-types:isis_level_proto_t
| | +--ro level-2-nlp-id* ipi-isis-types:isis_level_proto_t
| | +--ro multi-topology-type? ipi-isis-types:isis_multi_topology_types_t
| | +--ro up-time?        string
| | +--ro neighbor-protocol? ipi-isis-types:isis_neighbour_protocol_t
| | +--ro area-address*   string
+--ro ipv4-addresses
| +--ro state
| | +--ro address* inet:ipv4-address
+--ro ipv6-addresses
| +--ro state
| | +--ro address* inet:ipv6-address
+--ro level* [level-number]
| +--ro level-number      -> ../state/level-number
| +--ro state
| | +--ro level-number?   ipi-isis-types:isis_iflevel_t
| | +--ro next-hello-interval? cml-data-types:cml_line_t
| | +--ro mtu?            uint32
| | +--ro circuit-id?     string
| | +--ro active-adjacency-count? int32
| | +--ro csnp-interval?  cml-data-types:cml_line_t

```



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```

| | +--ro adjacency-changes?      uint32
| | +--ro adjacency-number?      uint32
| | +--ro init-fails?            uint32
| | +--ro rejected-adjacency?    uint32
| | +--ro id-field-length-mismatches?  uint32
| | +--ro max-area-address-mismatches? uint32
| | +--ro authentication-type-fails?  uint32
| | +--ro authentication-fails?      uint32
| | +--ro lan-dis-changes?         uint32
| +--ro isis-hellos
| | +--ro state
| |   +--ro received?  uint32
| |   +--ro sent?     uint32
| +--ro link-state-pdu
| | +--ro state
| |   +--ro received?  uint32
| |   +--ro sent?     uint32
| +--ro complete-sequence-number-pdu
| | +--ro state
| |   +--ro received?  uint32
| |   +--ro sent?     uint32
| +--ro partial-sequence-number-pdu
| | +--ro state
| |   +--ro received?  uint32
| |   +--ro sent?     uint32
| +--ro unknown
|   +--ro state
|     +--ro received?  uint32
|     +--ro sent?     uint32
+--rw config
| +--rw name?          -> /ipi-interface:interfaces/interface/name
| +--rw minimal?       ipi-isis-types:isis_auth_level_type_t
| +--rw send-only?     ipi-isis-types:isis_auth_level_type_t
| +--rw maximum-bandwidth-flex-algo?  string
| +--rw disable-asla-usage-flex-algo?  empty
+--ro state

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```

| +--ro name?                -> /ipi-interface:interfaces/interface/name
| +--ro minimal?             ipi-isis-types:isis_auth_level_type_t
| +--ro send-only?           ipi-isis-types:isis_auth_level_type_t
| +--ro maximum-bandwidth-flex-algo? string
| +--ro disable-asla-usage-flex-algo? empty
| +--ro isis-tag?            string
| +--ro network-type?        string
| +--ro circuit-type?        ipi-isis-types:isis_circuit_type_t
| +--ro local-circuit-id?    string
| +--ro extended-circuit-id? string
| +--ro local-snpa?          cml-data-types:cml_mac_addr_t
+--ro bandwidth
| +--ro state
+--ro p2p-circuit-counters
| +--ro state
|   +--ro adjacency-changes?    uint32
|   +--ro adjacency-number?     uint32
|   +--ro init-fails?           uint32
|   +--ro rejected-adjacency?   uint32
|   +--ro id-field-length-mismatches? uint32
|   +--ro max-area-address-mismatches? uint32
|   +--ro authentication-type-fails? uint32
|   +--ro authentication-fails?  uint32
|   +--ro lan-dis-changes?       uint32
+--rw connected-ipv4
| +--ro state
|   +--ro address* cml-data-types:cml_ipv4_addr_prefix_t
+--rw connected-ipv6
| +--ro state
|   +--ro address* cml-data-types:cml_ipv6_prefix_t
+--ro neighbor-P2P
| +--ro ipv4-addresses* [address]
| | +--ro address -> ../state/address
| | +--ro state
| |   +--ro address* inet:ipv4-address
| +--ro ipv6-addresses* [address]

```

---

---

```

| | +--ro address -> ../state/address
| | +--ro state
| |   +--ro address* inet:ipv6-address
| +--ro state
|   +--ro system-id?      string
|   +--ro circuit-id?     string
|   +--ro adjacency-state? ipi-isis-types:isis_state_t
|   +--ro remaining-hold-time? string
|   +--ro adjacency-type?  string
|   +--ro adjacency-advertisement? ipi-isis-types:isis_nbr_adj_t
|   +--ro neighbor-snpa?   string
|   +--ro level-1-nlp-id*   ipi-isis-types:isis_level_proto_t
|   +--ro level-2-nlp-id*   ipi-isis-types:isis_level_proto_t
|   +--ro multi-topology-type? ipi-isis-types:isis_multi_topology_types_t
|   +--ro up-time?         string
|   +--ro neighbor-protocol? ipi-isis-types:isis_neighbour_protocol_t
|   +--ro area-address*     string
+--rw interface-parameters
  +--rw config
  | +--rw network-type?      ipi-isis-types:isis_network_t
  | +--rw circuit-type?     ipi-isis-types:isis_circuit_type_t
  | +--rw ipv4-instance-tag? string
  | +--rw ipv6-instance-tag? string {feature-list:HAVE_IPV6}?
  | +--rw lsp-interval?     uint32
  | +--rw retransmit-interval? uint16
  | +--rw disable-padding?   empty
  | +--rw mesh-group-id?    ipi-isis-types:isis_mesh_type_t
  +--ro state
  | +--ro network-type?      ipi-isis-types:isis_network_t
  | +--ro circuit-type?     ipi-isis-types:isis_circuit_type_t
  | +--ro ipv4-instance-tag? string
  | +--ro ipv6-instance-tag? string {feature-list:HAVE_IPV6}?
  | +--ro lsp-interval?     uint32
  | +--ro retransmit-interval? uint16
  | +--ro disable-padding?   empty
  | +--ro mesh-group-id?    ipi-isis-types:isis_mesh_type_t

```

---

---

```

+--rw bfd {feature-list:HAVE_BFD}?
| +--rw config
| | +--rw enable?  empty
| | +--rw disable? empty
| +--ro state
|   +--ro enable?  empty
|   +--ro disable? empty
+--rw fast-re-route
| +--rw config
| | +--rw disable-level-1? empty {feature-list:HAVE_ISIS_LFA}?
| | +--rw disable-level-2? empty {feature-list:HAVE_ISIS_LFA}?
| +--ro state
|   +--ro disable-level-1? empty {feature-list:HAVE_ISIS_LFA}?
|   +--ro disable-level-2? empty {feature-list:HAVE_ISIS_LFA}?
+--rw level-infos
  +--rw level-info* [level]
    +--rw level      -> ../config/level
    +--rw config
      | +--rw te-minimum-delay?      uint32
      | +--rw te-maximum-delay?      uint32
      | +--rw te-minimum-delay-flex-algo? uint32
      | +--rw te-maximum-delay-flex-algo? uint32
      | +--rw level?                 ipi-isis-types:isis_level_t
      | +--rw hello-interval?        uint16
      | +--rw hello-multiplier?      uint8
      | +--rw csnp-interval?          uint16
      | +--rw priority?               uint8
      | +--rw metric?                uint8
      | +--rw password?              string
      | +--rw tag?                   uint32
      | +--rw wide-metric?            uint32
      | +--rw restart-hello-interval? uint16
    +--ro state
      | +--ro te-minimum-delay?      uint32
      | +--ro te-maximum-delay?      uint32
      | +--ro te-minimum-delay-flex-algo? uint32

```

---

---

```

| +--ro te-maximum-delay-flex-algo? uint32
| +--ro level? ipi-isis-types:isis_level_t
| +--ro hello-interval? uint16
| +--ro hello-multiplier? uint8
| +--ro csnp-interval? uint16
| +--ro priority? uint8
| +--ro metric? uint8
| +--ro password? string
| +--ro tag? uint32
| +--ro wide-metric? uint32
| +--ro restart-hello-interval? uint16
+--rw authentication
  +--rw config!
    | +--rw mode ipi-isis-types:isis_auth_mode_t
    | +--rw key-chain? string
  +--ro state
    +--ro mode ipi-isis-types:isis_auth_mode_t
    +--ro key-chain? string

```

rpcs:

```

+---x isis-restart-graceful {feature-list:HAVE_RESTART}?
| +---w input
|   +---w grace-period? uint16
+---x isis-clear-interface-counters {feature-list:HAVE_ISISD}?
| +---w input
|   +---w name? string
+---x isis-clear-is-neighbors {feature-list:HAVE_ISISD}?
| +---w input
|   +---w system-id string
+---x isis-clear-clns-neighbors {feature-list:HAVE_ISISD}?
+---x isis-clear-ip-route {feature-list:HAVE_ISISD}?
| +---w input
|   +---w instance? string
|   +---w ipv4-route ipi-isis-types:isis_route_t
+---x isis-clear-ipv6-route {feature-list:HAVE_ISISD}?
| +---w input

```

---

```

|   +---w instance?   string
|   +---w ipv6-route   ipi-isis-types:isis_route_t
+---x isis-process-clear {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w instance   string
+---x isis-clear-counters {feature-list:HAVE_ISISD}?
+---x isis-clear-adjacency-all {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w adjacency-vrf-name?  string
+---x isis-process-clear-adjacency-all {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w tag-name           string
|   +---w adjacency-vrf-name?  string
+---x isis-process-clear-adjacency-interface {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w tag-name           string
|   +---w tag-if-name?       string
|   +---w adjacency-vrf-name?  string
+---x isis-clear-adjacency-interface {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w adjacency-if-name?   string
|   +---w adjacency-vrf-name?   string
+---x isis-process-clear-adjacency-system-id {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w tag-name           string
|   +---w tag-system-id     ipi-isis-types:isis_systemid_t
|   +---w tag-vrf-name?     string
+---x isis-clear-adjacency-system-id {feature-list:HAVE_ISISD}?
|   +---w input
|   +---w adjacency-system-id  ipi-isis-types:isis_systemid_t
|   +---w adjacency-vrf-name?   string
+---x isis-restart-snmp {feature-list:HAVE_SNMP}?
+---x isis-terminal-debug-all-on {feature-list:HAVE_ISISD}?
+---x isis-terminal-debug-all-off {feature-list:HAVE_ISISD}?
+---x isis-terminal-debug-on {feature-list:HAVE_ISISD}?
|   +---w input

```

---

```

| +---w terminal-debug-options ipi-isis-types:isis_debug_t
+---x isis-debug-off {feature-list:HAVE_ISISD}?
| +---w input
| +---w terminal-debug-options ipi-isis-types:isis_debug_t
+---x isis-debug-hello-on {feature-list:HAVE_ISISD}?
+---x isis-debug-hello-off {feature-list:HAVE_ISISD}?
+---x isis-debug-interface-hello-on {feature-list:HAVE_ISISD}?
| +---w input
| +---w interface string
+---x isis-debug-interface-hello-off {feature-list:HAVE_ISISD}?
| +---w input
| +---w interface string
+---x isis-debug-system-id-hello-on {feature-list:HAVE_ISISD}?
| +---w input
| +---w system-id string
+---x isis-debug-system-id-hello-off {feature-list:HAVE_ISISD}?
| +---w input
| +---w system-id string
+---x isis-all-debug-off {feature-list:HAVE_ISISD}?

```

notifications:

```

+---n isis-database-overload
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro overload? ipi-isis-types:isis_overload_state_t
+---n isis-lsp-too-large
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro lsp-identifier? string
| +--ro pdu-length? uint32
+---n isis-corrupted-lsp-detected
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro lsp-identifier? string
+---n isis-attempt-to-exceed-max-sequence
| +--ro severity? cml-data-types:cml_notif_severity_t

```

---

```
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro lsp-identifier? string
+---n isis-id-len-mismatch
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro pdu-field-len? uint8
| +--ro raw-pdu?      string
+---n isis-max-area-addresses-mismatch
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro max-area-addresses? uint8
| +--ro raw-pdu?      string
+---n isis-own-lsp-purge
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro lsp-identifier? string
+---n isis-sequence-number-skipped
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro lsp-identifier? string
+---n isis-authentication-type-failure
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro raw-pdu?      string
+---n isis-authentication-failure
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro raw-pdu?      string
+---n isis-version-skew
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
| +--ro protocol-version? uint8
| +--ro raw-pdu?      string
+---n isis-area-mismatch
| +--ro severity?     cml-data-types:cml_notif_severity_t
| +--ro eventClass?   cml-data-types:cml_notif_class_t
```

---



---

```

| +--ro raw-pdu?    string
+---n isis-rejected-adjacency
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro raw-pdu?    string
| +--ro reason?     string
+---n isis-protocols-supported-mismatch
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro raw-pdu?    string
| +--ro protocols?  uint8
+---n isis-lsp-error-detected
  +--ro severity?    cml-data-types:cml_notif_severity_t
  +--ro eventClass?  cml-data-types:cml_notif_class_t
  +--ro lsp-identifier? string
  +--ro raw-pdu?     string
  +--ro error-offset? uint32
  +--ro tlv-type?    uint8

```

---

## module: ipi-keychain

```

+--rw key-chains
  +--rw key-chain* [name]
    +--rw name    -> ../config/name
    +--rw config
      | +--rw name? string
      +--ro state
      | +--ro name? string
      +--rw keys
        +--rw key-list* [key-id]
          +--rw key-id    -> ../config/key-id
          +--rw config
            | +--rw key-id?      uint32
            | +--rw (key-style)?
            |   +--:(key-string)
            |   | +--rw key-string? string

```

```
| +--:(hexadecimal)
|   +--rw encrypted?   keychain_hex_string_t
+--ro state
| +--ro key-id?        uint32
| +--ro (key-style)?
|   +--:(key-string)
|   | +--ro key-string? string
|   +--:(hexadecimal)
|       +--ro encrypted?   keychain_hex_string_t
+--rw accept-lifetime
| +--rw config
| | +--rw start-date-time-for-accept?   keychain_date_time_t
| | +--rw (end-time)?
| |   +--:(end-time)
| |   | +--rw end-date-time-for-accept?   keychain_date_time_t
| |   +--:(infinite)
| |   | +--rw infinite-for-accept?        empty
| |   +--:(duration)
| |       +--rw duration-for-accept?      uint32
| +--ro state
|   +--ro start-date-time-for-accept?   keychain_date_time_t
|   +--ro (end-time)?
|   +--:(end-time)
|   | +--ro end-date-time-for-accept?   keychain_date_time_t
|   +--:(infinite)
|   | +--ro infinite-for-accept?        empty
|   +--:(duration)
|       +--ro duration-for-accept?      uint32
+--rw send-lifetime
  +--rw config
  | +--rw start-date-time-for-send?      keychain_date_time_t
  | +--rw (end-time)?
  |   +--:(end-time)
  |   | +--rw end-date-time-for-send?    keychain_date_time_t
  |   +--:(infinite)
  |   | +--rw infinite-for-send?         empty
```

```

|   +--:(duration)
|   +--rw duration-for-send?    uint32
+--ro state
  +--ro start-date-time-for-send?  keychain_date_time_t
  +--ro (end-time)?
    +--:(end-time)
    | +--ro end-date-time-for-send?  keychain_date_time_t
    +--:(infinite)
    | +--ro infinite-for-send?      empty
    +--:(duration)
      +--ro duration-for-send?      uint32

```

---

## module: ipi-lacp

```

+--rw lacp
  +--rw global
  | +--rw config
  | | +--rw system-priority?  uint32
  | +--ro state
  | | +--ro system-priority?  uint32
  | | +--ro system-id?        cml-data-types:cml_mac_addr_t
+--rw debug
  +--rw config
  | +--rw options?  ipi-lacp-types:lacp_debug_t
  +--ro state
  | +--ro options?          ipi-lacp-types:lacp_debug_t
  | +--ro terminal-debug-status?  ipi-lacp-types:lacp_debug_t
+--ro aggregators
  +--ro aggregator* [agg-name]
  | +--ro agg-name  -> ../state/agg-name
  | +--ro state
  | | +--ro agg-name?          string
  | | +--ro interface-index?   uint32
  | | +--ro type?              ipi-lag-types:lag_aggregator_type_t
  | | +--ro mac-address?       cml-data-types:cml_mac_addr_t

```

---

```

| | +--ro rx-link-count?      yang:counter32
| | +--ro tx-link-count?      yang:counter32
| | +--ro individual-aggregator? ipi-lacp-types:lacp_individual_aggregator_t
| | +--ro aggregator-ready?    empty
| +--ro actor
| | +--ro state
| |   +--ro admin-key?        uint16
| |   +--ro oper-key?         uint16
| |   +--ro system-priority?   uint16
| |   +--ro system-id?        cml-data-types:cml_mac_addr_t
| +--ro partner
| | +--ro state
| |   +--ro oper-key?         uint16
| |   +--ro system-priority?   uint16
| |   +--ro system-id?        cml-data-types:cml_mac_addr_t
| +--ro members
|   +--ro member* [link-name]
|     +--ro link-name -> ../state/link-name
|     +--ro state
|       +--ro link-name?      string
|       +--ro sync-state?     ipi-lacp-types:lacp_synchronization_type_t
|       +--ro receive-state?   ipi-lacp-types:lacp_rcv_state_t
|       +--ro periodic-transmission-state? ipi-lacp-types:lacp_periodic_tx_state_t
|       +--ro mux-machine-state? ipi-lacp-types:lacp_mux_state_t
|       +--ro admin-key?       uint16
|       +--ro counters
|         +--ro lacp-out-pkts?   yang:counter32
|         +--ro lacp-in-pkts?    yang:counter32
|         +--ro lacp-in-marker-pdu? yang:counter32
|         +--ro lacp-out-marker-pdu? yang:counter32
|         +--ro lacp-tx-errors?   yang:counter32
|         +--ro lacp-rx-errors?   yang:counter32
|         +--ro lacp-in-marker-pdu-response? yang:counter32
|         +--ro lacp-out-marker-pdu-response? yang:counter32
|       +--ro actor
|       +--ro state

```

---

---

```

|      |  +--ro operational
|      |  |  +--ro activity?      ipi-lacp-types:lacp_activity_type_t
|      |  |  +--ro timeout?      ipi-lacp-types:lacp_timeout_type_t
|      |  |  +--ro aggregatable?  boolean
|      |  |  +--ro synchronization? ipi-lacp-types:lacp_synchronization_type_t
|      |  |  +--ro collecting?    boolean
|      |  |  +--ro distributing?  boolean
|      |  |  +--ro defaulted?     boolean
|      |  |  +--ro expired?       boolean
|      |  |  +--ro port-key?      uint16
|      |  +--ro admin
|      |  |  +--ro activity?      ipi-lacp-types:lacp_activity_type_t
|      |  |  +--ro timeout?      ipi-lacp-types:lacp_timeout_type_t
|      |  |  +--ro aggregatable?  boolean
|      |  |  +--ro synchronization? ipi-lacp-types:lacp_synchronization_type_t
|      |  |  +--ro collecting?    boolean
|      |  |  +--ro distributing?  boolean
|      |  |  +--ro defaulted?     boolean
|      |  |  +--ro expired?       boolean
|      |  |  +--ro port-key?      uint16
|      |  +--ro system-id?      cml-data-types:cml_mac_addr_t
|      |  +--ro system-priority? uint16
|      |  +--ro port-number?     uint16
|      |  +--ro port-priority?   uint16
|  +--ro partner
|      +--ro state
|          +--ro operational
|              |  +--ro activity?      ipi-lacp-types:lacp_activity_type_t
|              |  +--ro timeout?      ipi-lacp-types:lacp_timeout_type_t
|              |  +--ro aggregatable?  boolean
|              |  +--ro synchronization? ipi-lacp-types:lacp_synchronization_type_t
|              |  +--ro collecting?    boolean
|              |  +--ro distributing?  boolean
|              |  +--ro defaulted?     boolean
|              |  +--ro expired?       boolean
|              |  +--ro system-id?     cml-data-types:cml_mac_addr_t

```

---

```

|         | +--ro system-priority?  uint16
|         | +--ro port-number?      uint16
|         | +--ro port-priority?    uint16
|         | +--ro port-key?         uint16
|         +--ro admin
|             +--ro activity?        ipi-lacp-types:lacp_activity_type_t
|             +--ro timeout?         ipi-lacp-types:lacp_timeout_type_t
|             +--ro aggregatable?    boolean
|             +--ro synchronization? ipi-lacp-types:lacp_synchronization_type_t
|             +--ro collecting?      boolean
|             +--ro distributing?    boolean
|             +--ro defaulted?       boolean
|             +--ro expired?         boolean
|             +--ro system-id?       cml-data-types:cml_mac_addr_t
|             +--ro system-priority? uint16
|             +--ro port-number?     uint16
|             +--ro port-priority?   uint16

```

#### +--rw interfaces

```

+--rw interface* [name]
  +--rw name          -> ../config/name
  +--rw config
    | +--rw name? -> /ipi-interface:interfaces/interface/name
    +--ro state
    | +--ro name? -> /ipi-interface:interfaces/interface/name
    +--rw member-aggregation
    | +--rw config
    | | +--rw port-priority?  uint32
    | | +--rw timeout?       ipi-lacp-types:lacp_timeout_type_t
    | | +--rw bridge-type?   ipi-lacp-types:lacp_bridgetype_t
    | | +--rw force-up?      empty
    | | +--rw agg-force-up?  empty
    | +--ro state
    |   +--ro port-priority?  uint32
    |   +--ro timeout?       ipi-lacp-types:lacp_timeout_type_t
    |   +--ro bridge-type?   ipi-lacp-types:lacp_bridgetype_t
    |   +--ro force-up?      empty

```

```

|   +--ro agg-force-up?   empty
+--rw aggregator
  +--rw config
  +--ro state

```

rpcs:

```

+---x lacp-snmp-restart {feature-list:HAVE_SNMP}?
+---x clear-lacp-counters {feature-list:HAVE_LAGD}?
| +---w input
|   +---w aggregate-id   uint16
+---x lacp-terminal-debug-on {feature-list:HAVE_LAGD}?
| +---w input
|   +---w terminal-debug-options   ipi-lacp-types:lacp_debug_t
+---x lacp-terminal-debug-off {feature-list:HAVE_LAGD}?
  +---w input
    +---w terminal-debug-options   ipi-lacp-types:lacp_debug_t

```

---

## module: ipi-lldpv2

```

+--rw lldp
  +--rw global
    | +--rw config
    | | +--rw enable?          empty
    | | +--rw notification-interval?  uint16 {feature-list:HAVE_SNMP}?
    | +--ro state
    | | +--ro enable?          empty
    | | +--ro notification-interval?  uint16 {feature-list:HAVE_SNMP}?
    | | +--ro system-capabilities-enabled?  cml-data-types:cml_line_t
    | | +--ro host-name-information?   string
    | | +--ro counters
    | |   +--ro remote-inserts?  yang:counter32
    | |   +--ro remote-deletes?  yang:counter32

```

---

```

| | +--ro remote-drops? yang:counter32
| | +--ro remote-ageouts? yang:counter32
| +--rw global-tlv-control
| | +--rw global-basic-management
| | | +--rw config
| | | | +--rw port-description? empty
| | | | +--rw system-description? empty
| | | | +--rw system-name? empty
| | | | +--rw system-capabilities? empty
| | | | +--rw management-address? empty
| | | +--ro state
| | | | +--ro port-description? empty
| | | | +--ro system-description? empty
| | | | +--ro system-name? empty
| | | | +--ro system-capabilities? empty
| | | | +--ro management-address? empty
| | +--rw global-ieee-8021-org-specific
| | | +--rw config
| | | | +--rw port-vlan-id? empty
| | | | +--rw port-protocol-vlan-id? empty
| | | | +--rw vlan-name? empty
| | | | +--rw protocol-identifier? empty
| | | | +--rw vid-digest? empty
| | | | +--rw management-vlan-id? empty
| | | | +--rw link-aggregation? empty
| | | | +--rw dcb-exchange? empty {feature-list:HAVE_DCB}?
| | | +--ro state
| | | | +--ro port-vlan-id? empty
| | | | +--ro port-protocol-vlan-id? empty
| | | | +--ro vlan-name? empty
| | | | +--ro protocol-identifier? empty
| | | | +--ro vid-digest? empty
| | | | +--ro management-vlan-id? empty
| | | | +--ro link-aggregation? empty
| | | | +--ro dcb-exchange? empty {feature-list:HAVE_DCB}?
| | +--rw global-ieee-8023-org-specific

```

---



---

```

| | +--rw config
| | | +--rw mac-phy?    empty
| | | +--rw max-mtu-size? empty
| | +--ro state
| |   +--ro mac-phy?    empty
| |   +--ro max-mtu-size? empty
| +--rw management-if
|   +--rw config
|   | +--rw locally-assigned-chassis-id? string
|   +--ro state
|     +--ro locally-assigned-chassis-id? string
+--rw debug
| +--rw config
| | +--rw options? ipi-ldp-types:lldp_debug_t
| +--ro state
|   +--ro options?          ipi-ldp-types:lldp_debug_t
|   +--ro terminal-debug-status? ipi-ldp-types:lldp_debug_t
+--rw interfaces
  +--rw interface* [name]
    +--rw name      -> ../config/name
    +--rw config
    | +--rw name?          -> /ipi-interface:interfaces/interface/name
    | +--rw disable-ldp-agent? empty
    | +--rw agent-circuit-id? string
    | +--rw med-device-type? ipi-ldp-types:lldp_meddev_t
    | +--rw local-name?    string
    +--ro state
    | +--ro name?          -> /ipi-interface:interfaces/interface/name
    | +--ro disable-ldp-agent? empty
    | +--ro agent-circuit-id? string
    | +--ro med-device-type? ipi-ldp-types:lldp_meddev_t
    | +--ro local-name?    string
    +--ro neighbors
    | +--ro agent* [agent-type]
    |   +--ro agent-type ipi-ldp-types:lldp_agent_t
    |   +--ro neighbor* [mac-address]

```

---

---

```

|   +--ro mac-address   -> ../state/mac-address
|
|   +--ro state
|
|       +--ro mac-address?          cml-data-types:cml_mac_addr_t
|       +--ro system-name?          string
|       +--ro chassis-component?     string
|       +--ro chassis-id-type?       uint8
|       +--ro port-component?        string
|       +--ro port-id?               string
|       +--ro port-description?       string
|       +--ro port-sub-type?          uint16
|       +--ro interface-alias?       string
|       +--ro interface-agent-circuit-id? string
|       +--ro ttl?                   uint16
|       +--ro interface-number?       uint32
|       +--ro interface-number-sub-type? string
|       +--ro port-vlan-id?           uint16
|       +--ro pp-vlanid?              uint16
|       +--ro protocol?               ipi-lldp-types:lldp_protoid_t
|       +--ro vid-usage-digest?       uint32
|       +--ro management-vlan?        uint16
|       +--ro auto-negotiation-support? uint8
|       +--ro auto-negotiation-capability? uint16
|       +--ro operational-mau-type?    uint16
|       +--ro link-aggregate-capability? cml-data-types:cml_line_t
|       +--ro link-aggregate-id?       uint32
|       +--ro max-frame-size?          uint16
|       +--ro system-description?      string
|       +--ro system-capabilities?     cml-data-types:cml_line_t
|       +--ro system-capabilities-enabled? cml-data-types:cml_line_t
|       +--ro vlan-list* [vlan-id]
|           | +--ro vlan-id    uint16
|           | +--ro vlan-name? string
|       +--ro management-list* [address]
|           +--ro address        string
|           +--ro address-sub-type? cml-data-types:cml_line_t
|           +--ro interface-number-sub-type? string

```

---

---

```

|      +--ro interface-number?      uint32
|      +--ro oid?                    string
+--rw agents
  +--rw agent* [agent-type]
    +--rw agent-type  -> ../config/agent-type
    +--rw config
      | +--rw agent-type?  ipi-lldp-types:lldp_agent_t
      | +--rw enable-tx-rx? ipi-lldp-types:lldp_enable_t
      | +--rw dcbx-enable?  boolean {feature-list:HAVE_DCB}?
    +--ro state
      | +--ro agent-type?  ipi-lldp-types:lldp_agent_t
      | +--ro enable-tx-rx? ipi-lldp-types:lldp_enable_t
      | +--ro dcbx-enable?  boolean {feature-list:HAVE_DCB}?
    +--rw transmit
      | +--rw config
      | | +--rw reinit-delay?      uint32
      | | +--rw message-tx-interval?  uint32
      | | +--rw message-tx-hold-multiplier? uint32
      | | +--rw message-fast-tx?      uint32
      | | +--rw tx-credit-max?        uint32
      | | +--rw tx-fast-init?         uint32
      | +--ro state
      | | +--ro reinit-delay?      uint32
      | | +--ro message-tx-interval?  uint32
      | | +--ro message-tx-hold-multiplier? uint32
      | | +--ro message-fast-tx?      uint32
      | | +--ro tx-credit-max?        uint32
      | | +--ro tx-fast-init?         uint32
      | | +--ro tx-ttl?            uint16
      | +--ro counters
      | | +--ro frames-out?  yang:counter32
    +--rw receive
      | +--rw config
      | | +--rw neighbor-limit?  uint32
      | | +--rw neighbor-timer?  uint32
      | | +--rw port-mac?        cml-data-types:cml_mac_addr_t

```

---

```
| | +--rw port-timer?      uint32
| +--ro state
|   +--ro neighbor-limit?  uint32
|   +--ro neighbor-timer?  uint32
|   +--ro port-mac?        cml-data-types:cml_mac_addr_t
|   +--ro port-timer?      uint32
|   +--ro frames-aged-out?  yang:counter32
|   +--ro frames-discarded? yang:counter32
|   +--ro frames-invalid?   yang:counter32
|   +--ro frames-valid?     yang:counter32
|   +--ro tlvs-discarded?   yang:counter32
|   +--ro tlvs-unrecognized? yang:counter32
+--rw agent-tlv
| +--rw config
| | +--rw port-address? ipi-lldp-types:lldp_mgmt_addr_t
| | +--rw chassis-id?  ipi-lldp-types:lldp_chassis_t
| | +--rw port-id?     ipi-lldp-types:lldp_port_t
| +--ro state
|   +--ro port-address? ipi-lldp-types:lldp_mgmt_addr_t
|   +--ro chassis-id?  ipi-lldp-types:lldp_chassis_t
|   +--ro port-id?     ipi-lldp-types:lldp_port_t
+--rw tlv-control
  +--rw basic-management
  | +--rw config
  | | +--rw port-description? ipi-lldp-types:lldp_tlv_select_type
  | | +--rw system-description? ipi-lldp-types:lldp_tlv_select_type
  | | +--rw system-name?       ipi-lldp-types:lldp_tlv_select_type
  | | +--rw system-capabilities? ipi-lldp-types:lldp_tlv_select_type
  | | +--rw management-address? ipi-lldp-types:lldp_tlv_select_type
  | +--ro state
  |   +--ro port-description? ipi-lldp-types:lldp_tlv_select_type
  |   +--ro system-description? ipi-lldp-types:lldp_tlv_select_type
  |   +--ro system-name?       ipi-lldp-types:lldp_tlv_select_type
  |   +--ro system-capabilities? ipi-lldp-types:lldp_tlv_select_type
  |   +--ro management-address? ipi-lldp-types:lldp_tlv_select_type
  +--rw ieee-8021-org-specific
```

```
| +--rw config
| | +--rw port-vlan-id?      ipi-lldp-types:lldp_tlv_select_type
| | +--rw port-protocol-vlan-id? ipi-lldp-types:lldp_tlv_select_type
| | +--rw vlan-name?        ipi-lldp-types:lldp_tlv_select_type
| | +--rw protocol-identifier? ipi-lldp-types:lldp_tlv_select_type
| | +--rw vid-digest?        ipi-lldp-types:lldp_tlv_select_type
| | +--rw management-vlan-id? ipi-lldp-types:lldp_tlv_select_type
| | +--rw link-aggregation?   ipi-lldp-types:lldp_tlv_select_type
| | +--rw dcb-exchange?       ipi-lldp-types:lldp_tlv_select_type {feature-list:HAVE_DCB}?
| +--ro state
|   +--ro port-vlan-id?      ipi-lldp-types:lldp_tlv_select_type
|   +--ro port-protocol-vlan-id? ipi-lldp-types:lldp_tlv_select_type
|   +--ro vlan-name?        ipi-lldp-types:lldp_tlv_select_type
|   +--ro protocol-identifier? ipi-lldp-types:lldp_tlv_select_type
|   +--ro vid-digest?        ipi-lldp-types:lldp_tlv_select_type
|   +--ro management-vlan-id? ipi-lldp-types:lldp_tlv_select_type
|   +--ro link-aggregation?   ipi-lldp-types:lldp_tlv_select_type
|   +--ro dcb-exchange?       ipi-lldp-types:lldp_tlv_select_type {feature-list:HAVE_DCB}?
+--rw ieee-8023-org-specific
| +--rw config
| | +--rw mac-phy?      ipi-lldp-types:lldp_tlv_select_type
| | +--rw max-mtu-size? ipi-lldp-types:lldp_tlv_select_type
| +--ro state
|   +--ro mac-phy?      ipi-lldp-types:lldp_tlv_select_type
|   +--ro max-mtu-size? ipi-lldp-types:lldp_tlv_select_type
+--rw tlv-media-capabilities
  +--rw config
  | +--rw network-policy? ipi-lldp-types:lldp_tlv_select_type
  | +--rw location?       ipi-lldp-types:lldp_tlv_select_type
  | +--rw inventory?      ipi-lldp-types:lldp_tlv_select_type
  | +--rw media-capabilities? ipi-lldp-types:lldp_tlv_select_type
  +--ro state
  | +--ro network-policy? ipi-lldp-types:lldp_tlv_select_type
  | +--ro location?       ipi-lldp-types:lldp_tlv_select_type
  | +--ro inventory?      ipi-lldp-types:lldp_tlv_select_type
  | +--ro media-capabilities? ipi-lldp-types:lldp_tlv_select_type
```

rpcs:

```
+---x lldp-terminal-debug-on {feature-list:HAVE_ONMD,feature-list:HAVE_LLDPV2}?
| +---w input
|   +---w terminal-debug-options   ipi-ldp-types:lldp_debug_t
+---x lldp-terminal-debug-off {feature-list:HAVE_ONMD,feature-list:HAVE_LLDPV2}?
| +---w input
|   +---w terminal-debug-options   ipi-ldp-types:lldp_debug_t
+---x clear-ldp-counter {feature-list:HAVE_ONMD,feature-list:HAVE_LLDPV2}?
| +---w input
|   +---w interface-name?  string
+---x lldp-snmp-restart {feature-list:HAVE_SNMP}?
```

notifications:

```
+---n lldp-remote-inserts-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-inserts? yang:counter32
+---n lldp-remote-deletes-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-deletes? yang:counter32
```

---

## module: ipi-logging

```
+--rw logging
| +--rw logging-modules
| | +--rw module-logging* [module-name]
| |   +--rw module-name  -> ../config/module-name
| |   +--rw config
| | | +--rw module-name?   ipi-logging-types:module_names_t
| | | +--rw severity-level ipi-logging-types:log_severity_t
```

```
|  +--ro state
|    +--ro module-name?   ipi-logging-types:module_names_t
|    +--ro severity-level  ipi-logging-types:log_severity_t
+--rw monitor-logging
| +--rw config!
| | +--rw enable-logging   cml-data-types:cml_enable_disable_t
| | +--rw severity-level?  ipi-logging-types:log_severity_t
| +--ro state
|   +--ro enable-logging   cml-data-types:cml_enable_disable_t
|   +--ro severity-level?  ipi-logging-types:log_severity_t
+--rw console-logging
| +--rw config!
| | +--rw enable-logging   cml-data-types:cml_enable_disable_t
| | +--rw severity-level?  ipi-logging-types:log_severity_t
| +--ro state
|   +--ro enable-logging   cml-data-types:cml_enable_disable_t
|   +--ro severity-level?  ipi-logging-types:log_severity_t
+--rw logfile
| +--rw config!
| | +--rw file-name        string
| | +--rw severity-level   ipi-logging-types:log_severity_t
| | +--rw max-file-size?   uint32
| +--ro state
|   +--ro file-name        string
|   +--ro severity-level   ipi-logging-types:log_severity_t
|   +--ro max-file-size?   uint32
+--rw debug-logfile
| +--rw config!
| | +--rw file-name        string
| | +--rw max-file-size    uint32
| +--ro state
|   +--ro file-name        string
|   +--ro max-file-size    uint32
+--rw syslog {feature-list:HAVE_SYSLOG}?
| +--rw config
| | +--rw timestamp-granularity? ipi-logging-types:timestamp_units_t
```

```

| | +--rw cli-timestamp?      empty
| | +--ro state
| |   +--ro timestamp-granularity? ipi-logging-types:timestamp_units_t
| |   +--ro cli-timestamp?      empty
+--rw remote-logging
| +--rw config
| | +--rw enable-rsyslog? empty
| | +--ro state
| | | +--ro enable-rsyslog? empty
| | +--rw remote-servers {feature-list:HAVE_VRF}?
| | | +--rw remote-server* [vrf]
| | |   +--rw vrf      -> ../config/vrf
| | |   +--rw config
| | | | +--rw vrf? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name {feature-
list:HAVE_VRF}?
| | |   +--ro state
| | | | +--ro vrf? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name {feature-
list:HAVE_VRF}?
| | |   +--rw servers
| | | |   +--rw server* [address]
| | | |   +--rw address -> ../config/address
| | | |   +--rw config
| | | | | +--rw address? cml-data-types:cml_hostname_t
| | | | | +--rw severity ipi-logging-types:log_severity_t
| | | | | +--rw port?    uint16
| | | |   +--ro state
| | | | | +--ro address? cml-data-types:cml_hostname_t
| | | | | +--ro severity ipi-logging-types:log_severity_t
| | | | | +--ro port?    uint16
| | +--rw default-instance
| | +--rw config
| | | +--rw disable-default-instance? empty
| | +--ro state
| | | +--ro disable-default-instance? empty
+--rw global
| +--rw config
| | +--rw remote-server-facility? ipi-logging-types:log_facility_t

```



---

```

| | +--rw remote-authpriv-facility? empty
| +--ro state
|   +--ro remote-server-facility? ipi-logging-types:log_facility_t
|   +--ro remote-authpriv-facility? empty
+--rw cli-logging
| +--rw config
| | +--rw enable-logging? empty
| +--ro state
| | +--ro enable-logging? empty
| +--rw max-session-limit
|   +--rw config
|   | +--rw max-session-limit? uint8
|   +--ro state
|     +--ro max-session-limit? uint8
+--rw fault-management
  +--rw config
  | +--rw enable-fault-management? empty
  +--ro state
    +--ro enable-fault-management? empty

```

rpcs:

```

+---x logging-fms-flush-db {feature-list:HAVE_FMS}?
+---x logging-fms-shelve {feature-list:HAVE_FMS}?
| +---w input
|   +---w alarm-type string
+---x logging-fms-close {feature-list:HAVE_FMS}?
| +---w input
|   +---w active-alarm-id string
+---x terminal-debug-all-off
+---x logging-clear-debug-logfile
+---x logging-clear-logging-logfile
+---x remove-file
  +---w input
    +---w file_type ipi-logging-types:remove_files_t
    +---w filename ipi-logging-types:file_type_t

```

---

## module: ipi-management-server

```
+--rw netconf-server {feature-list:HAVE_NETCONF}?
| +--rw callhome {feature-list:HAVE_NETCONF}?
| | +--rw config!
| | | +--rw feature-enabled empty
| | | +--rw management-port? -> /ipi-interface:interfaces/interface/name
| | +--ro state
| | | +--ro feature-enabled empty
| | | +--ro management-port? -> /ipi-interface:interfaces/interface/name
| | +--rw netconf-clients
| | | +--rw netconf-client* [name]
| | |   +--rw name -> ../config/name
| | |   +--rw config
| | |   | +--rw name? string
| | |   | +--rw address string
| | |   | +--rw port? inet:port-number
| | |   +--ro state
| | |   +--ro name? string
| | |   +--ro address string
| | |   +--ro port? inet:port-number
| | +--rw reconnect
| | +--rw config!
| | | +--rw enable empty
| | | +--rw retry-max-attempts? uint8
| | | +--rw retry-interval? uint32
| | +--ro state
| | +--ro enable empty
| | +--ro retry-max-attempts? uint8
| | +--ro retry-interval? uint32
| +--rw netconf-translation {feature-list:HAVE_NETCONF_OC_TRANSLATION}?
| | +--rw config
| | | +--rw translation-mode? ipi-management-server-types:management_server_translation_type_t
```

---

```

| | +--ro state
| |   +--ro translation-mode? ipi-management-server-types:management_server_translation_type_t
| | +--rw debug
| | +--rw config
| | | +--rw enable? empty
| | +--ro state
| |   +--ro enable? empty
| | +--rw vrfs {feature-list:HAVE_VRF}?
| |   +--rw vrf* [vrf-name]
| |     +--rw vrf-name      -> ../config/vrf-name
| |     +--rw config
| |       | +--rw vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
| |       +--ro state
| |       | +--ro vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
| |       +--rw netconf-ssh-config
| |         +--rw config!
| |           | +--rw feature-netconf-ssh  boolean {feature-list:HAVE_NETCONF}?
| |           | +--rw ssh-port?           uint32 {feature-list:HAVE_NETCONF}?
| |           | +--ro state
| |           |   +--ro feature-netconf-ssh  boolean {feature-list:HAVE_NETCONF}?
| |           |   +--ro ssh-port?           uint32 {feature-list:HAVE_NETCONF}?
| |           +--rw netconf-tls-config
| |             +--rw config!
| |               | +--rw feature-netconf-tls  boolean {feature-list:HAVE_NETCONF}?
| |               | +--rw tls-port?           uint32 {feature-list:HAVE_NETCONF}?
| |               +--ro state
| |                 +--ro feature-netconf-tls  boolean {feature-list:HAVE_NETCONF}?
| |                 +--ro tls-port?           uint32 {feature-list:HAVE_NETCONF}?
| | +--rw notification-cache {feature-list:HAVE_NETCONF}?
| |   +--rw config!
| |     +--rw feature-enabled      empty
| |     +--rw max-cache-notifications? uint16
| |     +--rw cache-period?       uint32
| |   +--ro state
| |     +--ro feature-enabled      empty

```

---

---

```

|   +--ro max-cache-notifications?  uint16
|   +--ro cache-period?             uint32
+--rw management-server
  +--rw module-notifications
    +--rw module-notification* [module-name]
      +--rw module-name   -> ../config/module-name
      +--rw config
        | +--rw module-name?  ipi-management-server-notification-types:notif_module_names_t
        | +--rw enable       cml-data-types:cml_enable_disable_t
        | +--rw severity?    cml-data-types:cml_notif_severity_t
        +--ro state
          +--ro module-name?  ipi-management-server-notification-types:notif_module_names_t
          +--ro enable       cml-data-types:cml_enable_disable_t
          +--ro severity?    cml-data-types:cml_notif_severity_t

```

notifications:

```

+---n suppress-bulk-notification
  +--ro severity?  cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message?   string

```

---

## module: ipi-mcec

```

+--rw mcec
  +--rw debug
    | +--rw config
    | | +--rw options? ipi-mcec-types:mcec_debug_t
    | +--ro state
    | +--ro options?   ipi-mcec-types:mcec_debug_t
    | +--ro terminal-debug-status? ipi-mcec-types:mcec_debug_t
  +--rw domain
    | +--rw config
    | | +--rw mcec-strict-active-standby? empty
    | | +--rw system-number?             uint8
    | | +--rw address?                   ipi-mcec-types:mcec_domain_addr_t

```

---

```

| | +--rw priority?          uint16
| | +--rw hello-timeout?     ipi-mcec-types:mcec_hello_t
| +--ro state
|   +--ro mcec-strict-active-standby? empty
|   +--ro system-number?     uint8
|   +--ro address?           ipi-mcec-types:mcec_domain_addr_t
|   +--ro priority?          uint16
|   +--ro hello-timeout?     ipi-mcec-types:mcec_hello_t
|   +--ro domain-sync?       ipi-mcec-types:mcec_domain_sync_status_t
|   +--ro domain-adjacency?   ipi-mcec-types:mcec_domain_adjacency_state_t
|   +--ro mcec-invalid-pdu-rx? uint32
+--ro mcec-instance* [mlag-id]
| +--ro mlag-id    -> ../state/mlag-id
| +--ro state
| | +--ro mlag-id?          uint16
| | +--ro interface?        string
| | +--ro administrative-aggregation-key? uint16
| | +--ro operational-aggregation-key?   uint16
| | +--ro physical-properties-digest?    string
| | +--ro operational-partner-aggregation-key? uint16
| | +--ro partner-system?      string
| | +--ro partner-system-priority? uint16
| | +--ro member-interface-bandwidth?    string
| | +--ro member-interface-state?        ipi-mcec-types:mcec_if_state_t
| | +--ro mlag-sync?                ipi-mcec-types:mcec_sync_state_t
| | +--ro flood-enabled?             ipi-mcec-types:mcec_flood_state_t
| | +--ro mlag-port-state?           ipi-mcec-types:mcec_if_state_t
| | +--ro mlag-interface-state?      ipi-mcec-types:mcec_if_state_t
| | +--ro aggregation-mapped?        boolean
| | +--ro mlag-bandwidth?             string
| | +--ro info-receive-state?         ipi-mcec-types:mcec_info_receive_state_t
| | +--ro info-periodic-tx-state?     ipi-mcec-types:mcec_info_periodic_tx_state_t
| | +--ro valid-info-pdu-rx?          uint32
| | +--ro valid-info-pdu-tx?          uint32
| +--ro neighbor
|   +--ro state

```

---

---

```

|   +--ro administrative-aggregation-key?   uint16
|   +--ro physical-properties-digest?      string
|   +--ro operational-partner-aggregation-key? uint16
|   +--ro partner-system?                  string
|   +--ro partner-system-priority?         uint16
|   +--ro member-interface-bandwidth?     string
|   +--ro member-interface-state?         ipi-mcec-types:mcec_if_state_t
|   +--ro mlag-sync?                      ipi-mcec-types:mcec_sync_state_t
+--rw intra-domain
| +--rw peer-link
| | +--rw config
| | | +--rw interface? -> /ipi-interface:interfaces/interface/name
| | | +--rw higig?     empty {feature-list:NOT_HAVE_DUNE}?
| | +--ro state
| |   +--ro interface? -> /ipi-interface:interfaces/interface/name
| |   +--ro higig?     empty {feature-list:NOT_HAVE_DUNE}?
| +--rw peer-address
| | +--rw config!
| | | +--rw peer-address  inet:ipv4-address
| | | +--rw local-address inet:ipv4-address
| | | +--rw vrf           -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
| | +--ro state
| |   +--ro peer-address  inet:ipv4-address
| |   +--ro local-address inet:ipv4-address
| |   +--ro vrf           -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
| +--ro neighbor-info
| | +--ro state
| |   +--ro domain-address? ipi-mcec-types:mcec_domain_addr_t
| |   +--ro domain-priority? uint32
| |   +--ro domain-system-number? uint16
| |   +--ro domain-sync?     ipi-mcec-types:mcec_domain_sync_status_t
| |   +--ro hello-timeout?   uint16
| +--ro intra-domain-peer-info
|   +--ro state
|     +--ro mcec-hello-periodic-tx-state? ipi-mcec-types:mcec_hello_periodic_tx_state_t

```

---

---

```

|   +--ro mcec-valid-hello-pdu-rx?    uint32
|   +--ro mcec-valid-hello-pdu-tx?    uint32
|   +--ro mcec-valid-info-pdu-rx?     uint32
|   +--ro mcec-valid-info-pdu-tx?     uint32
|   +--ro mcec-valid-mac-sync-pdu-rx?  uint32
|   +--ro mcec-valid-mac-sync-pdu-tx?  uint32
+--ro mac-sync
| +--ro local-mac-table* [mac-address vlan-id]
| | +--ro mac-address  -> ../state/mac-address
| | +--ro vlan-id      -> ../state/vlan-id
| | +--ro state
| |   +--ro mac-address?    string
| |   +--ro vlan-id?        uint16
| |   +--ro output-interface? string
| +--ro remote-mac-table* [mac-address vlan-id]
|   +--ro mac-address  -> ../state/mac-address
|   +--ro vlan-id      -> ../state/vlan-id
|   +--ro state
|     +--ro mac-address?    string
|     +--ro vlan-id?        uint16
|     +--ro output-interface? string
+--ro stp-sync
| +--ro state
| | +--ro bridge-priority?    uint16
| | +--ro path-cost-method?   uint8
| | +--ro domain-digest?     string
| | +--ro neighbor-domain-digest? string
| +--ro mlag-interface-sync-entry* [mlag-id]
|   +--ro mlag-id  -> ../state/mlag-id
|   +--ro state
|     +--ro mlag-id?          uint16
|     +--ro port-priority?    uint16
|     +--ro path-cost?        uint32
|     +--ro interface-digest? string
|     +--ro neighbor-interface-digest? string
+--rw mlag-interfaces

```

---

```

+--rw mlag-interface* [name]
  +--rw name          -> ../config/name
  +--rw config
    | +--rw name?      -> /ipi-interface:interfaces/interface/name
    | +--rw interface-mode? ipi-mcec-types:mcec_mode_type_t
    +--ro state
      | +--ro name?    -> /ipi-interface:interfaces/interface/name
      | +--ro interface-mode? ipi-mcec-types:mcec_mode_type_t
      +--rw switchover-type
        +--rw config
          | +--rw revertive-timer?    uint8
          | +--rw enable-non-revertive? empty
          +--ro state
            +--ro revertive-timer?    uint8
            +--ro enable-non-revertive? empty

```

rpcs:

```

+---x mcec-terminal-debug-on {feature-list:HAVE_LAGD,feature-list:HAVE_MCEC}?
| +---w input
|   +---w terminal-debug-options ipi-mcec-types:mcec_debug_t
+---x mcec-terminal-debug-off {feature-list:HAVE_LAGD,feature-list:HAVE_MCEC}?
| +---w input
|   +---w terminal-debug-options ipi-mcec-types:mcec_debug_t
+---x clear-mcec-statistics {feature-list:HAVE_LAGD,feature-list:HAVE_MCEC}?

```

---

## module: ipi-mlag

```

+--ro mlag
  +--ro mlag-interface* [mlag-id]
    | +--ro mlag-id -> ../state/mlag-id
    | +--ro state
      | +--ro mlag-id?    uint16
      | +--ro interface-flags? ipi-mlag-types:mlag_interface_flags_t
      | +--ro bandwidth?   string
      +--ro intra-domain-port

```



```

| +--ro state
|   +--ro interface-name?  string
|   +--ro interface-index? uint32
|   +--ro interface-type?  ipi-mlag-types:mlag_idp_interface_type_t
|   +--ro bridge-name?     string
+--ro mstp-sync-info
  +--ro state
  |   +--ro bridge-priority?  uint16
  |   +--ro path-cost-method? uint8
  |   +--ro num-of-interfaces? uint16
  |   +--ro domain-digest*   string
  +--ro interface-sync-info* [interface-mlag-id]
    +--ro interface-mlag-id  -> ../state/interface-mlag-id
    +--ro state
    |   +--ro interface-mlag-id?  uint16
    |   +--ro interface-priority? uint16
    |   +--ro path-cost?         uint32
    |   +--ro interface-digest*  string

```

augment /ipi-interface:interfaces/ipi-interface:interface:

```

+--rw mlag-aggregation!
  +--rw config!
  |   +--rw mlag-id  uint16
  +--ro state
    +--ro mlag-id  uint16

```

---

## module: ipi-mld-snooping

```

+--rw mld-snooping
  +--rw global
  |   +--rw config
  |   |   +--rw disable-mld-snooping?  empty
  |   |   +--rw disable-report-suppression? empty

```

```

| +--ro state
|   +--ro disable-mld-snooping?      empty
|   +--ro disable-report-suppression? empty
+--rw debug
| +--rw config
| | +--rw options? ipi-mld-snooping-types:mld_snoop_debug_options_t
| +--ro state
|   +--ro options?      ipi-mld-snooping-types:mld_snoop_debug_options_t
|   +--ro terminal-debug-status? ipi-mld-snooping-types:mld_snoop_debug_options_t
+--rw interfaces
  +--rw interface* [name]
    +--rw name      -> ../config/name
    +--rw config
    | +--rw name?          -> /ipi-interface:interfaces/interface/name
    | +--rw mld-snooping?   cml-data-types:cml_enable_disable_t
    | +--rw enable-fast-leave? empty
    | +--rw report-suppression? cml-data-types:cml_enable_disable_t
    | +--rw mrouter-interface-name* -> /ipi-interface:interfaces/interface/name
    | +--rw enable-querier?   empty
    +--ro state
    | +--ro name?          -> /ipi-interface:interfaces/interface/name
    | +--ro mld-snooping?   cml-data-types:cml_enable_disable_t
    | +--ro enable-fast-leave? empty
    | +--ro report-suppression? cml-data-types:cml_enable_disable_t
    | +--ro mrouter-interface-name* -> /ipi-interface:interfaces/interface/name
    +--ro enable-querier?   empty

```

rpcs:

```

+---x mld-snooping-terminal-debug-on {feature-list:HAVE_MLD_SNOOP}?
| +---w input
|   +---w terminal-debug-options ipi-mld-snooping-types:mld_snoop_debug_options_t
+---x mld-snooping-terminal-debug-off {feature-list:HAVE_MLD_SNOOP}?
| +---w input
|   +---w terminal-debug-options ipi-mld-snooping-types:mld_snoop_debug_options_t
+---x mld-snooping-clear-group-on-interface {feature-list:HAVE_MLD_SNOOP}?
| +---w input

```

---

```

|   +---w group-address   string
|   +---w interface-name  string
+---x mld-snooping-clear-all-groups-on-interface {feature-list:HAVE_MLD_SNOOP}?
| +---w input
|   +---w interface-name  string
+---x mld-snooping-clear-group {feature-list:HAVE_MLD_SNOOP}?
| +---w input
|   +---w group-address   string
+---x mld-snooping-clear-all-groups {feature-list:HAVE_MLD_SNOOP}?

```

---

## module: ipi-mld

```

+--rw mld
| +--rw vrfs
| | +--rw vrf* [vrf-name]
| |   +--rw vrf-name          -> ../config/vrf-name
| |   +--rw config
| | | +--rw vrf-name?        -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
| | | +--rw disable-ssm-map? empty
| |   +--ro state
| | | +--ro vrf-name?        -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
| | | +--ro disable-ssm-map? empty
| |   +--rw group-membership-control
| | | +--rw config
| | | | +--rw member-limit?    uint32
| | | | +--rw limit-exception-acl? string
| | |   +--ro state
| | | | +--ro member-limit?    uint32
| | | | +--ro limit-exception-acl? string
| | |   +--ro current-states-count? yang:counter32
| |   +--rw ssm
| | | +--rw static-mappings
| | | | +--rw static-mapping* [group-ranges-acl source]
| | | |   +--rw group-ranges-acl -> ../config/group-ranges-acl
| | | |   +--rw source           -> ../config/source

```

---

```

| |   +--rw config
| |   | +--rw group-ranges-acl?  string
| |   | +--rw source?           inet:ipv6-address
| |   +--ro state
| |       +--ro group-ranges-acl?  string
| |       +--ro source?           inet:ipv6-address
| +--rw debug
|   +--rw config
|   | +--rw debug-options?  ipi-mld-types:mld_debug_options_t
|   +--ro state
|       +--ro debug-options?      ipi-mld-types:mld_debug_options_t
|       +--ro terminal-debug-status-on?  ipi-mld-types:mld_debug_options_t
+--rw interfaces
| +--rw interface* [name]
|   +--rw name                -> ../config/name
|   +--rw config
|   | +--rw name?              -> /ipi-interface:interfaces/interface/name
|   | +--rw enabled?          empty
|   | +--rw last-member-query-count?  uint8
|   | +--rw last-member-query-interval?  uint16
|   | +--rw querier-timeout?      uint16
|   | +--rw query-interval?      uint16
|   | +--rw query-max-response-time?  uint8
|   | +--rw startup-query-interval?  uint16
|   | +--rw startup-query-count?    uint8
|   | +--rw robustness-variable?    uint8
|   | +--rw version?            uint8
|   +--ro state
|   | +--ro counters
|   | | +--ro v1-reports-received?  yang:counter32
|   | | +--ro v2-reports-received?  yang:counter32
|   | | +--ro v1-leaves-received?   yang:counter32
|   | | +--ro current-group-records? yang:counter32
|   | +--ro internet-address?      inet:ipv6-address
|   | +--ro oper-status?           ipi-mld-types:mld_if_oper_status_t
|   | +--ro host-version?          uint8

```

---

---

```

| | +--ro is-querier?          boolean
| | +--ro querying-router?     inet:ipv6-address
| | +--ro group-membership-interval?  uint32
| | +--ro name?                -> /ipi-interface:interfaces/interface/name
| | +--ro enabled?             empty
| | +--ro last-member-query-count?  uint8
| | +--ro last-member-query-interval? uint16
| | +--ro querier-timeout?       uint16
| | +--ro query-interval?       uint16
| | +--ro query-max-response-time?  uint8
| | +--ro startup-query-interval?  uint16
| | +--ro startup-query-count?    uint8
| | +--ro robustness-variable?    uint8
| | +--ro version?              uint8
| +--rw proxy
| | +--rw config
| | | +--rw enable-proxy-service?    empty
| | | +--rw mroute-proxy-interface?  string
| | | +--rw unsolicited-report-interval? uint16
| | +--ro state
| | | +--ro enable-proxy-service?    empty
| | | +--ro mroute-proxy-interface?  string
| | | +--ro unsolicited-report-interval? uint16
| | | +--ro oper-status?              ipi-mld-types:mld_proxy_if_oper_status_t
| | | +--ro upstream-interface?      string
| | | +--ro mcast-groups-count?      yang:counter32
| +--rw group-membership-control
| | +--rw config
| | | +--rw access-group-name?       string
| | | +--rw immediate-leave-groups-list? string
| | | +--rw member-limit?            uint32
| | | +--rw limit-exception-acl?     string
| | +--ro state
| | | +--ro access-group-name?       string
| | | +--ro immediate-leave-groups-list? string
| | | +--ro member-limit?            uint32

```

---

---

```

| | +--ro limit-exception-acl?      string
| +--rw asm-static-groups
| | +--rw asm-static-group* [group-address]
| | +--rw group-address  -> ../config/group-address
| | +--rw config
| | | +--rw group-address?  inet:ipv6-address
| | +--ro state
| | +--ro group-address?  inet:ipv6-address
| +--rw ssm-static-groups
| +--rw ssm-static-group* [group-address source]
| +--rw group-address  -> ../config/group-address
| +--rw source          -> ../config/source
| +--rw config
| | +--rw group-address?  inet:ipv6-address
| | +--rw source?        ipi-mld-types:mld_static_ssm_source_t
| +--ro state
| +--ro group-address?  inet:ipv6-address
| +--ro source?        ipi-mld-types:mld_static_ssm_source_t
+--ro group-membership-tree
+--ro mld-instances
+--ro mld-instance* [vrf-name]
+--ro vrf-name  -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
+--ro interfaces
+--ro interface* [if-name]
+--ro if-name    -> /ipi-interface:interfaces/interface/name
+--ro member-groups
| +--ro member-group* [group-address]
| +--ro group-address  -> ../state/group-address
| +--ro state
| | +--ro group-address?  inet:ipv6-address
| | +--ro dynamic-remote? empty
| | +--ro static-group?   empty
| | +--ro ssm-mapped?     empty
| | +--ro static-source?  empty
| | +--ro up-time?        string
| | +--ro group-mode?     ipi-mld-types:mld_ssm_group_mode_t

```

---

---

```

| | +--ro expiry?      string
| | +--ro last-reporter? inet:ipv6-address
| | +--ro include-sources
| | +--ro include-source* [source-address]
| |   +--ro source-address -> ../state/source-address
| |   +--ro state
| |     +--ro source-address? inet:ipv6-address
| |     +--ro dynamic-remote? empty
| |     +--ro static-source? empty
| |     +--ro ssm-mapped? empty
| |     +--ro up-time?      string
| |     +--ro expiry?      string
| |     +--ro is-forwarded? ipi-mld-types:mld_yes_no_t
| +--ro exclude-sources
|   +--ro exclude-source* [source-address]
|     +--ro source-address -> ../state/source-address
|     +--ro state
|       +--ro source-address? inet:ipv6-address
|       +--ro dynamic-remote? empty
|       +--ro static-source? empty
|       +--ro ssm-mapped? empty
|       +--ro up-time?      string
|       +--ro expiry?      string
|       +--ro is-forwarded? ipi-mld-types:mld_yes_no_t
+--ro proxy-groups
  +--ro proxy-group* [group-address]
    +--ro group-address -> ../state/group-address
    +--ro state
      +--ro group-address? inet:ipv6-address
      +--ro proxy-interface? string
      +--ro group-mode? ipi-mld-types:mld_ssm_group_mode_t
      +--ro oper-state? ipi-mld-types:mld_if_state_t
      +--ro membership-state? ipi-mld-types:mld_proxy_grp_membership_state_t
      +--ro multicast-sources* inet:ipv6-address

```

rpcs:

```

+---x mld-terminal-debug-on {feature-list:HAVE_MCAST_IPV6,feature-list:NOT_HAVE_DUNE_OR_HAVE_DNX}?
| +---w input
|   +---w vrf-name?      string
|   +---w term-debug-options  ipi-mld-types:mld_debug_options_t
+---x mld-terminal-debug-off {feature-list:HAVE_MCAST_IPV6,feature-list:NOT_HAVE_DUNE_OR_HAVE_DNX}?
| +---w input
|   +---w vrf-name?      string
|   +---w term-debug-options  ipi-mld-types:mld_debug_options_t
+---x mld-clear-all-groups {feature-list:HAVE_MCAST_IPV6,feature-list:NOT_HAVE_DUNE_OR_HAVE_DNX}?
| +---w input
|   +---w vrf-name?  string
|   +---w clear-all  empty
+---x mld-clear-group-on-interface {feature-list:HAVE_MCAST_IPV6,feature-
list:NOT_HAVE_DUNE_OR_HAVE_DNX}?
| +---w input
|   +---w vrf-name?  string
|   +---w if-name    string
|   +---w group-address  inet:ipv6-address
+---x mld-clear-all-groups-on-interface {feature-list:HAVE_MCAST_IPV6,feature-
list:NOT_HAVE_DUNE_OR_HAVE_DNX}?
| +---w input
|   +---w vrf-name?  string
|   +---w if-name    string
+---x mld-clear-group {feature-list:HAVE_MCAST_IPV6,feature-list:NOT_HAVE_DUNE_OR_HAVE_DNX}?
+---w input
+---w vrf-name?  string
+---w group-address  inet:ipv6-address

```

---

## module: ipi-mrib

```
+--rw mrib
```



```

+--rw ipv4
| +--rw vrfs
| | +--rw vrf* [vrf-name]
| |   +--rw vrf-name      -> ../config/vrf-name
| |   +--rw config
| |     +--rw vrf-name?    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| |     +--rw multicast-routing-enable? empty
| |     +--ro state
| |     +--ro counters
| |       +--ro total-multicast-routes?    yang:counter32
| |       +--ro dense-mode-multicast-routes? yang:counter32
| |       +--ro sparse-mode-multicast-routes? yang:counter32
| |       +--ro no-cache-received?         yang:counter32
| |       +--ro no-cache-sent?             yang:counter32
| |       +--ro wrong-VIF-received?        yang:counter32
| |       +--ro wrong-VIF-sent?            yang:counter32
| |       +--ro whole-packet-received?     yang:counter32
| |       +--ro whole-packet-sent?         yang:counter32
| |       +--ro immediate-stat-updates-sent? yang:counter32
| |       +--ro timed-stat-updates-sent?   yang:counter32
| |       +--ro register-packets-sent?     yang:counter32
| |       +--ro register-acks-received?    yang:counter32
| |       +--ro register-nacks-received?   yang:counter32
| |       +--ro no-cache-receive-rate?     decimal64
| |       +--ro register-packet-sent-rate? decimal64
| |     +--ro vrf-name?    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| |     +--ro multicast-routing-enable? empty
| |     +--ro stats-poll-expiry-time?  string
| |     +--rw route-limit
| |     +--rw config
| |       +--rw maximum-routes?  uint32
| |       +--rw warning-threshold? uint32
| |     +--ro state
| |       +--ro maximum-routes?  uint32
| |       +--ro warning-threshold? uint32

```

---

```

| | +--rw debug
| | | +--rw config
| | | | +--rw options? ipi-mrib-types:mrib_debug_t
| | | | +--ro state
| | | | +--ro options? ipi-mrib-types:mrib_debug_t
| | | | +--ro terminal-debug-status? ipi-mrib-types:mrib_debug_t
| | +--ro multicast-routes
| | +--ro multicast-route* [source group]
| | +--ro source -> ../state/source
| | +--ro group -> ../state/group
| | +--ro state
| | | +--ro counters
| | | | +--ro packets-forwarded? yang:counter32
| | | | +--ro bytes-forwarded? yang:counter32
| | | | +--ro wrong-VIF-sent? yang:counter32
| | | | +--ro wrong-VIF-received? yang:counter32
| | | | +--ro source? inet:ip-address
| | | | +--ro group? inet:ip-address
| | | | +--ro incoming-interface? string
| | | | +--ro rpf-address? inet:ip-address
| | | | +--ro route-type? ipi-mrib-types:mrib_route_type_t
| | | | +--ro uptime? string
| | | | +--ro stats-poll-expiry-time? string
| | | | +--ro immediate-stats? empty
| | | | +--ro timed-stats? empty
| | | | +--ro forwarder-installed? empty
| | +--ro outgoing-interfaces
| | +--ro outgoing-interface* [name]
| | +--ro name -> ../state/name
| | +--ro state
| | +--ro name? -> /ipi-interface:interfaces/interface/name
| | +--ro time-to-live? uint8
| +--rw interfaces
| +--rw interface* [name]
| +--rw name -> ../config/name
| +--rw config

```

---

---

```

|   | +--rw name?          -> /ipi-interface:interfaces/interface/name
|   | +--rw ttl-threshold? uint8
|   +--ro state
|       +--ro name?          -> /ipi-interface:interfaces/interface/name
|       +--ro ttl-threshold? uint8
|       +--ro local-address? inet:ip-address {feature-list:HAVE_MRIB_IPV4}?
|       +--ro remote-address? inet:ip-address {feature-list:HAVE_MRIB_IPV4}?
|       +--ro uptime?        string
|       +--ro module-name?    string
|       +--ro vif-index?      uint32
+--rw ipv6
    +--rw vrfs
        | +--rw vrf* [vrf-name]
        |   +--rw vrf-name      -> ../config/vrf-name
        |   +--rw config
        |   | +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
        |   | +--rw multicast-routing-enable? empty
        |   +--ro state
        |   | +--ro counters
        |   | | +--ro total-multicast-routes?    yang:counter32
        |   | | +--ro dense-mode-multicast-routes? yang:counter32
        |   | | +--ro sparse-mode-multicast-routes? yang:counter32
        |   | | +--ro no-cache-received?        yang:counter32
        |   | | +--ro no-cache-sent?            yang:counter32
        |   | | +--ro wrong-VIF-received?       yang:counter32
        |   | | +--ro wrong-VIF-sent?          yang:counter32
        |   | | +--ro whole-packet-received?    yang:counter32
        |   | | +--ro whole-packet-sent?       yang:counter32
        |   | | +--ro immediate-stat-updates-sent? yang:counter32
        |   | | +--ro timed-stat-updates-sent?  yang:counter32
        |   | | +--ro register-packets-sent?    yang:counter32
        |   | | +--ro register-acks-received?   yang:counter32
        |   | | +--ro register-nacks-received?  yang:counter32
        |   | | +--ro no-cache-receive-rate?    decimal64
        |   | | +--ro register-packet-sent-rate? decimal64

```

---

---

```

| | +--ro vrf-name?          -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| | +--ro multicast-routing-enable? empty
| | +--ro stats-poll-expiry-time?  string
| +--rw route-limit
| | +--rw config
| | | +--rw maximum-routes?  uint32
| | | +--rw warning-threshold? uint32
| | +--ro state
| | | +--ro maximum-routes?  uint32
| | | +--ro warning-threshold? uint32
| +--rw debug
| | +--rw config
| | | +--rw options? ipi-mrib-types:mrib_debug_t
| | +--ro state
| | | +--ro options?          ipi-mrib-types:mrib_debug_t
| | | +--ro terminal-debug-status? ipi-mrib-types:mrib_debug_t
| +--ro multicast-routes
| | +--ro multicast-route* [source group]
| | | +--ro source          -> ../state/source
| | | +--ro group           -> ../state/group
| | | +--ro state
| | | | +--ro counters
| | | | | +--ro packets-forwarded? yang:counter32
| | | | | +--ro bytes-forwarded?   yang:counter32
| | | | | +--ro wrong-VIF-sent?    yang:counter32
| | | | | +--ro wrong-VIF-received? yang:counter32
| | | | +--ro source?            inet:ip-address
| | | | +--ro group?             inet:ip-address
| | | | +--ro incoming-interface? string
| | | | +--ro rpf-address?       inet:ip-address
| | | | +--ro route-type?        ipi-mrib-types:mrib_route_type_t
| | | | +--ro uptime?           string
| | | | +--ro stats-poll-expiry-time? string
| | | | +--ro immediate-stats?   empty
| | | | +--ro timed-stats?      empty
| | | | +--ro forwarder-installed? empty

```

---

```

|      +--ro outgoing-interfaces
|      +--ro outgoing-interface* [name]
|      +--ro name      -> ../state/name
|      +--ro state
|      +--ro name?      -> /ipi-interface:interfaces/interface/name
|      +--ro time-to-live? uint8
+--rw interfaces
+--rw interface* [name]
+--rw name      -> ../config/name
+--rw config
| +--rw name?      -> /ipi-interface:interfaces/interface/name
| +--rw ttl-threshold? uint8
+--ro state
+--ro name?      -> /ipi-interface:interfaces/interface/name
+--ro ttl-threshold? uint8
+--ro local-address? inet:ip-address {feature-list:HAVE_MRIB_IPV4}?
+--ro remote-address? inet:ip-address {feature-list:HAVE_MRIB_IPV4}?
+--ro uptime?      string
+--ro module-name?  string
+--ro vif-index?    uint32

```

rpcs:

```

+---x mrib-ipv4-terminal-debug-on {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options ipi-mrib-types:mrib_debug_t
+---x mrib-ipv4-terminal-debug-off {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options ipi-mrib-types:mrib_debug_t
+---x mrib-ipv4-clear-mroute-all {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w all-routes      empty
+---x mrib-ipv4-clear-mroute-group {feature-list:HAVE_MRIBD}?
| +---w input

```

---

```
|   +---w vrf-name?      string
|   +---w group-address  inet:ipv4-address
+---x mrib-ipv4-clear-mroute-source-group {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w source-address  inet:ipv4-address
|   +---w group-address  inet:ipv4-address
+---x mrib-ipv4-clear-mroute-statistics-all {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w all-routes     empty
+---x mrib-ipv4-clear-mroute-statistics-group {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w group-address  inet:ipv4-address
+---x mrib-ipv4-clear-mroute-statistics-source-group {feature-list:HAVE_MRIBD}?
| +---w input
|   +---w vrf-name?      string
|   +---w source-address  inet:ipv4-address
|   +---w group-address  inet:ipv4-address
+---x mrib-ipv4-snmp-restart {feature-list:HAVE_SNMP}?
+---x mrib-ipv6-terminal-debug-on {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options  ipi-mrib-types:mrib_debug_t
+---x mrib-ipv6-terminal-debug-off {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options  ipi-mrib-types:mrib_debug_t
+---x mrib-ipv6-clear-mroute-all {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
| +---w input
|   +---w vrf-name      string
|   +---w all-routes     empty
+---x mrib-ipv6-clear-mroute-group {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
| +---w input
|   +---w vrf-name      string
```

---

```

|   +---w group-address   inet:ipv6-address
+---x mrib-ipv6-clear-mroute-source-group {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
|   +---w input
|   +---w vrf-name        string
|   +---w source-address  inet:ipv6-address
|   +---w group-address   inet:ipv6-address
+---x mrib-ipv6-clear-mroute-statistics-all {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
|   +---w input
|   +---w vrf-name        string
|   +---w all-routes      empty
+---x mrib-ipv6-clear-mroute-statistics-group {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
|   +---w input
|   +---w vrf-name        string
|   +---w group-address   inet:ipv6-address
+---x mrib-ipv6-clear-mroute-statistics-source-group {feature-list:HAVE_MRIBD,feature-list:HAVE_MCAST_IPV6}?
  +---w input
    +---w vrf-name        string
    +---w source-address  inet:ipv6-address
    +---w group-address   inet:ipv6-address

```

---

## module: ipi-neighbor-discovery

```

+--rw neighbor-discovery
  +--rw entries
    | +--rw entry* [ipv6-address interface-name]
    |   +--rw ipv6-address   -> ../config/ipv6-address
    |   +--rw interface-name -> ../config/interface-name
    |   +--rw config
    |     | +--rw ipv6-address?   inet:ipv6-address
    |     | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
    |     | +--rw mac-address     cml-data-types:cml_mac_addr_t
    |     +--ro state
    |       +--ro ipv6-address?   inet:ipv6-address
    |       +--ro interface-name? -> /ipi-interface:interfaces/interface/name
    |       +--ro mac-address     cml-data-types:cml_mac_addr_t

```

```
|   +--ro neighbor-age?      string
|   +--ro neighbor-source?   ipi-nd-types:ndd_nd_src_type_t
|   +--ro neighbor-state?    ipi-nd-types:ndd_nd_state_t
|   +--ro neighbor-if-state?  ipi-nd-types:ndd_nd_if_type_t
+--rw debug
| +--rw config
| | +--rw enable?  empty
| +--ro state
| | +--ro enable?          empty
| | +--ro terminal-debug-status?  cml-data-types:cml_on_off_t
+--rw interfaces
| +--rw interface* [name]
| | +--rw name      -> ../config/name
| | +--rw config
| | | +--rw name?          -> /ipi-interface:interfaces/interface/name
| | | +--rw nd-ageing-timeout?  uint16
| | | +--rw nd-reachable-time?  uint32
| | | +--rw no-ip-unreachable?  empty
| | | +--rw no-ipv6-unreachable? empty
| | +--ro state
| | | +--ro name?          -> /ipi-interface:interfaces/interface/name
| | | +--ro nd-ageing-timeout?  uint16
| | | +--ro nd-reachable-time?  uint32
| | | +--ro no-ip-unreachable?  empty
| | | +--ro no-ipv6-unreachable? empty
+--ro dynamic-neighbor-discovery* [vrf-name]
  +--ro vrf-name      string
  +--ro entry* [ipv6-address]
    | +--ro ipv6-address      inet:ipv6-address
    | +--ro mac-address?      cml-data-types:cml_mac_addr_t
    | +--ro interface-name?   string
    | +--ro neighbor-age?     string
    | +--ro neighbor-source?   ipi-nd-types:ndd_nd_src_type_t
    | +--ro neighbor-state?    ipi-nd-types:ndd_nd_state_t
    | +--ro neighbor-if-state? ipi-nd-types:ndd_nd_if_type_t
    +--ro adjacency-summary
```



```

+--ro resolved-arp?   uint32
+--ro incomplete-arp? uint32
+--ro unknown-arp?    uint32
+--ro total-arp?      uint32

```

rpcs:

```

+---x nd-terminal-debug-on {feature-list:HAVE_L3,feature-list:HAVE_IPV6,feature-list:HAVE_NDD}?
+---x nd-terminal-debug-off {feature-list:HAVE_L3,feature-list:HAVE_IPV6,feature-list:HAVE_NDD}?
+---x clear-ipv6-nd-entry {feature-list:HAVE_L3,feature-list:HAVE_IPV6,feature-list:HAVE_NDD}?
| +---w input
|   +---w ipv6-address?  cml-data-types:cml_ipv6_prefix_t
|   +---w vrf-name?      string
+---x clear-ipv6-nd-entry-per-interface {feature-list:HAVE_L3,feature-list:HAVE_IPV6,feature-list:HAVE_NDD}?
  +---w input
    +---w if-name    string
    +---w vrf-name?  string

```

---

## module: ipi-network-instance

```

+--rw network-instances
+--rw network-instance* [instance-name instance-type]
  +--rw instance-name  -> ../config/instance-name
  +--rw instance-type  -> ../config/instance-type
  +--rw config
  | +--rw instance-name?  string
  | +--rw instance-type? ipi-network-instance-types:net_inst_type_t
  +--ro state
    +--ro instance-name?  string
    +--ro instance-type? ipi-network-instance-types:net_inst_type_t

```

---

## module: ipi-network-services-manager

```

+--rw network-services-manager

```

```

+--rw debug
  +--rw nsm
    | +--rw config
    | | +--rw options? ipi-network-services-manager-types:nsm_debug_t
    | +--ro state
    |   +--ro options? ipi-network-services-manager-types:nsm_debug_t
  +--rw pkt-mgr
    | +--rw config
    | | +--rw options? ipi-network-services-manager-types:nsm_pkt_mgr_debug_t {feature-list:HAVE_L2}?
    | +--ro state
    |   +--ro options? ipi-network-services-manager-types:nsm_pkt_mgr_debug_t {feature-list:HAVE_L2}?
  +--rw hsl {feature-list:HAVE_USER_HSL}?
    | +--rw hsl-module* [module-name]
    |   +--rw module-name -> ../config/module-name
    |   +--rw config
    |     | +--rw module-name? ipi-network-services-manager-types:hsl_debug_module_t
    |     | +--rw level      ipi-network-services-manager-types:hsl_debug_level_t
    |     +--ro state
    |       +--ro module-name? ipi-network-services-manager-types:hsl_debug_module_t
    |       +--ro level      ipi-network-services-manager-types:hsl_debug_level_t
  +--ro terminal
    +--ro nsm
      | +--ro state
      |   +--ro terminal-debug-status? ipi-network-services-manager-types:nsm_debug_t
    +--ro pkt-mgr
      +--ro state
        +--ro terminal-debug-status? ipi-network-services-manager-types:nsm_pkt_mgr_debug_t {feature-
list:HAVE_L2}?

rpcs:
+---x nsm-terminal-debug-on
  | +---w input
  |   +---w terminal-debug-options ipi-network-services-manager-types:nsm_exec_debug_t
+---x nsm-terminal-debug-off
  | +---w input
  |   +---w terminal-debug-options ipi-network-services-manager-types:nsm_exec_debug_t
+---x hsl-terminal-debug-on {feature-list:NOT_HAVE_SWFWDR,feature-list:HAVE_HAL}?

```

---

```

| +---w input
|   +---w module-name   ipi-network-services-manager-types:hsl_debug_module_t
|   +---w level          ipi-network-services-manager-types:hsl_debug_level_t
+---x hsl-terminal-debug-off {feature-list:NOT_HAVE_SWFWDR,feature-list:HAVE_HAL}?
| +---w input
|   +---w module-name   ipi-network-services-manager-types:hsl_debug_module_t
|   +---w level          ipi-network-services-manager-types:hsl_debug_level_t
+---x pktmgr-terminal-debug-on {feature-list:HAVE_L2}?
| +---w input
|   +---w terminal-debug-options ipi-network-services-manager-types:nsm_pkt_mgr_debug_t
+---x pktmgr-terminal-debug-off {feature-list:HAVE_L2}?
+---x pktmgr-debug-statistics-enable
+---x pktmgr-debug-statistics-disable
+---x pktmgr-debug-statistics-get
+---x pktmgr-debug-error-statistics-get
| +---w input
|   +---w debug-error-statistics ipi-network-services-manager-types:nsm_pktmgr_statistics_type_t
+---x clear-nsm-ipc-statistics {feature-list:HAVE_ASYNC}?
+---x clear-nsm-server-ipc-statistics
+---x nsm-snmp-restart {feature-list:HAVE_SNMP}?

```

---

## module: ipi-ntp

```

+--rw ntp
|   +--rw vrfs
|   |   +--rw vrf* [vrf-name]
|   |   |   +--rw vrf-name          -> ../config/vrf-name
|   |   |   +--rw config
|   |   |   |   +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
|   |   |   |   +--rw feature-enable? boolean
|   |   |   |   +--rw enable-ntp?    boolean
|   |   |   |   +--rw enable-logging? empty
|   |   |   +--ro state
|   |   |   |   +--ro vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
|   |   |   |   +--ro feature-enable? boolean

```

---

```

| | +--ro enable-ntp?    boolean
| | +--ro enable-logging? empty
| | +--rw ref-clock-master
| | +--rw config!
| | | +--rw enable-local-master    empty
| | | +--rw local-stratum?        uint8
| | +--ro state
| |   +--ro enable-local-master    empty
| |   +--ro local-stratum?        uint8
| +--rw authentication
| | +--rw config
| | | +--rw enable-ntp-auth?    empty
| | | +--rw ntp-trusted-keys*   uint32
| | | +--rw ntp-request-key?    uint32
| | +--ro state
| | | +--ro enable-ntp-auth?    empty
| | | +--ro ntp-trusted-keys*   uint32
| | | +--ro ntp-request-key?    uint32
| | +--rw ntp-keys
| |   +--rw ntp-key* [key-id]
| |     +--rw key-id    -> ../config/key-id
| |     +--rw config
| |       | +--rw key-id?    uint32
| |       | +--rw key-value  string
| |       | +--rw key-type   ipi-ntp-types:ntp_hostp_key_type_t
| |       +--ro state
| |         +--ro key-id?    uint32
| |         +--ro key-value  string
| |         +--ro key-type   ipi-ntp-types:ntp_hostp_key_type_t
| +--rw servers
| | +--rw server* [server-address]
| |   +--rw server-address    -> ../config/server-address
| |   +--rw config
| |     | +--rw server-address? string
| |     | +--rw prefer?        empty
| |     | +--rw auth-key?      uint32

```

---

---

```

| | | +--rw minpoll?      uint16
| | | +--rw maxpoll?      uint16
| |   +--ro state
| |     +--ro server-address? string
| |     +--ro prefer?      empty
| |     +--ro auth-key?    uint32
| |     +--ro minpoll?     uint16
| |     +--ro maxpoll?     uint16
|   +--rw peers
| | +--rw peer* [peer-address]
| |   +--rw peer-address -> ../config/peer-address
| |   +--rw config
| | | +--rw peer-address? string
| | | +--rw prefer?      empty
| | | +--rw auth-key?    uint32
| | | +--rw minpoll?     uint16
| | | +--rw maxpoll?     uint16
| |   +--ro state
| |     +--ro peer-address? string
| |     +--ro prefer?      empty
| |     +--ro auth-key?    uint32
| |     +--ro minpoll?     uint16
| |     +--ro maxpoll?     uint16
|   +--rw rate-limiting
| | +--rw config
| | | +--rw minimum-pkt-spacing? uint16
| |   +--ro state
| |     +--ro minimum-pkt-spacing? uint16
|   +--rw access-control-entries
| | +--rw access-control-entry* [client-ip-address]
| |   +--rw client-ip-address -> ../config/client-ip-address
| |   +--rw config
| | | +--rw client-ip-address? inet:ip-address
| | | +--rw netmask?          ipi-ntp-types:ntp_client_ip_net_mask_t
| | | +--rw access-options?   ipi-ntp-types:ntp_acl_options_t
| |   +--ro state

```

---

```

|      +--ro client-ip-address?  inet:ip-address
|      +--ro netmask?            ipi-ntp-types:ntp_client_ip_net_mask_t
|      +--ro access-options?     ipi-ntp-types:ntp_acl_options_t
+--rw debug
| +--rw config
| | +--rw enable?  empty
| +--ro state
|   +--ro enable?          empty
|   +--ro terminal-debug-status?  cml-data-types:cml_on_off_t
+--ro peer-info
  +--ro peers
    +--ro peer* [peer-address]
      +--ro peer-address  -> ../state/peer-address
      +--ro state
        +--ro peer-address?  cml-data-types:cml_hostname_t
        +--ro stratum?       uint8
        +--ro poll-interval? uint32
        +--ro reach-value?   uint16
        +--ro root-delay?    decimal64
        +--ro offset?        decimal64

```

rpcs:

```

+---x ntp-clear-statistics {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_NTP}?
| +---w input
|   +---w statistics-type  ipi-ntp-types:ntp_statistics_type_t
+---x ntp-retry-server-synchronization {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_NTP}?
| +---w input
|   +---w vrf-name  string
+---x ntp-terminal-debug-on {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_NTP}?
+---x ntp-terminal-debug-off {feature-list:HAVE_HOSTPD,feature-list:HAVE_HOSTP_NTP}?

```

---

## module: ipi-object-tracking

```

+--rw object-tracking
  +--rw trackers

```

---

```

| +--rw tracker* [tracker-id]
|   +--rw tracker-id  -> ../config/tracker-id
|   +--rw config
|     | +--rw tracker-id?  uint16
|     | +--rw ip-sla-id    uint16
|     | +--rw delay-up?   uint16
|     | +--rw delay-down? uint16
|     +--ro state
|       +--ro tracker-id?      uint16
|       +--ro ip-sla-id        uint16
|       +--ro delay-up?        uint16
|       +--ro delay-down?      uint16
|       +--ro reachability-status? ipi-object-tracking-types:object_tracking_reachability_status_t {feature-
list:HAVE_OBJ_TRACKING}?
+--rw interfaces
  +--rw interface* [name]
    +--rw name          -> ../config/name
    +--rw config
      | +--rw name?      -> /ipi-interface:interfaces/interface/name
      | +--rw select-option? ipi-object-tracking-types:object_tracking_select_option_t
      +--ro state
        | +--ro name?      -> /ipi-interface:interfaces/interface/name
        | +--ro select-option? ipi-object-tracking-types:object_tracking_select_option_t
      +--rw track-interfaces
        +--rw track-interface* [track-id]
          +--rw track-id  -> ../config/track-id
          +--rw config
            | +--rw track-id? uint32
            +--ro state
              +--ro track-id? uint32

```

---

## module: ipi-ospf-interface-tracking

```
+--rw ospf-interfaces-events-tracking
  +--rw ospf-interface-events-tracking* [event-name]
    +--rw event-name -> ../config/event-name
    +--rw config
      | +--rw event-name?          string
      | +--rw event-match-criteria ipi-ospf-interface-tracking-types:intf_track_match_type_t
      | +--rw event-neighbor-ip-address* inet:ipv4-address
    +--ro state
      | +--ro event-name?          string
      | +--ro event-match-criteria ipi-ospf-interface-tracking-types:intf_track_match_type_t
      | +--ro event-neighbor-ip-address* inet:ipv4-address
    +--rw actions
      +--rw interfaces
        +--rw interface* [name]
          +--rw name -> ../config/name
          +--rw config
            | +--rw name? -> /ipi-interface:interfaces/interface/name
            | +--rw cost  uint32
          +--ro state
            +--ro name? -> /ipi-interface:interfaces/interface/name
            +--ro cost  uint32
```

---

## module: ipi-ospf

```
+--rw ospfv2
```



```

+--rw global
| +--rw config
| | +--rw area-interface-config-mode?    empty
| | +--rw enable-multi-instance-capability? empty {feature-list:HAVE_OSPF_MULTI_INST}?
| +--ro state
| | +--ro area-interface-config-mode?    empty
| | +--ro enable-multi-instance-capability? empty {feature-list:HAVE_OSPF_MULTI_INST}?
| +--rw graceful-restart {feature-list:HAVE_RESTART}?
|   +--rw config
|   | +--rw grace-period? uint16
|   +--ro state
|   | +--ro grace-period? uint16
|   +--rw helper
|     +--rw config
|     | +--rw max-grace-period?    uint16
|     | +--rw disable-all-neighbors? empty
|     | +--rw disable-neighbor*    inet:ipv4-address
|     +--ro state
|     | +--ro max-grace-period?    uint16
|     | +--ro disable-all-neighbors? empty
|     | +--ro disable-neighbor*    inet:ipv4-address
+--rw processes
| +--rw process* [ospf-id]
|   +--rw ospf-id      -> ../config/ospf-id
|   +--rw config
|   | +--rw ospf-id?          uint16
|   | +--rw vrf-name          -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name {feature-list:HAVE_VRF}?
|   | +--rw router-id?        inet:ipv4-address
|   | +--rw flood-reduction?   empty
|   | +--rw rfc1583-compatibility? empty
|   | +--rw database-summary?  empty
|   | +--rw bfd-enable-all-interfaces? empty {feature-list:HAVE_BFD}?
|   | +--rw log-adjacency-changes? ipi-ospf-types:ospf_log_adj_opt_t
|   | +--rw shutdown?         empty
|   | +--rw area-border-type?  ipi-ospf-types:ospf_abr_type_t
|   | +--rw reference-bandwidth? uint32

```

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```
| | +--rw max-database-descriptors? uint16
| | +--rw p2p-rfc-incompatible? empty
| | +--rw context-name? string
| +--ro state
| | +--ro statistics
| | | +--ro router
| | | | +--ro area-counter? yang:counter64
| | | | +--ro database-description-exchanges
| | | | | +--ro in? yang:counter64
| | | | | +--ro out? yang:counter64
| | | | +--ro link-state-advertisement
| | | | | +--ro originate? yang:counter64
| | | | | +--ro received? yang:counter64
| | | | | +--ro external? yang:counter64
| | | | | +--ro opaque? yang:counter64
| | | | | +--ro non-default-external? yang:counter64
| | | | +--ro router-event
| | | | | +--ro packet
| | | | | | +--ro packets-send-buffer? yang:counter64
| | | | | | | +--ro unused-packets? yang:counter64
| | | | | | | +--ro max-unused-packets? yang:counter64
| | | | +--ro lsa
| | | | | +--ro older-lsa-received? yang:counter64
| | | | | +--ro lsa-buffer? uint32
| | | | +--ro spf
| | | | | +--ro full? yang:counter64
| | | | | +--ro summary? yang:counter64
| | | | | +--ro external? yang:counter64
| | | | +--ro neighbor
| | | | | +--ro state-change? yang:counter64
| | | | | +--ro dead-interval-expiration? yang:counter64
| | | | | +--ro bad-link-state-request? yang:counter64
| | | | | +--ro sequence-number-mismatch? yang:counter64
| | | +--ro router-id-changes? yang:counter64
| | | +--ro designated-router-election? yang:counter64
| | +--ro error
```

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```

| | | +--ro discarded-in?      yang:counter64
| | | +--ro discarded-out?     yang:counter64
| | | +--ro hello-in?         yang:counter64
| | | +--ro database-descriptor-in? yang:counter64
| | | +--ro ls-request-in?     yang:counter64
| | | +--ro ls-update-in?      yang:counter64
| | | +--ro ls-acknowledge-in? yang:counter64
| | | +--ro unknown-in?       yang:counter64
| | | +--ro unknown-out?      yang:counter64
| | | +--ro bad-version?      yang:counter64
| | | +--ro bad-crc?          yang:counter64
| | | +--ro invalid-source?    yang:counter64
| | | +--ro invalid-destination? yang:counter64
| | | +--ro no-neighbor?      yang:counter64
| | | +--ro passive?          yang:counter64
| | | +--ro wrong-area?       yang:counter64
| | | +--ro packets-length?    yang:counter64
| | | +--ro bad-authentication? yang:counter64
| | +--ro traffic
| | | +--ro total-packets-in?   yang:counter64
| | | +--ro total-packets-out?  yang:counter64
| | | +--ro hello-packets-in?  yang:counter64
| | | +--ro hello-packets-out? yang:counter64
| | | +--ro database-descriptor-packets-in? yang:counter64
| | | +--ro database-descriptor-packets-out? yang:counter64
| | | +--ro ls-request-packets-in? yang:counter64
| | | +--ro ls-request-packets-out? yang:counter64
| | | +--ro ls-update-packets-in? yang:counter64
| | | +--ro ls-update-packets-out? yang:counter64
| | | +--ro ls-acknowledge-packets-in? yang:counter64
| | | +--ro ls-acknowledge-packets-out? yang:counter64
| | +--ro up-time?             string
| | +--ro ospf-id?             uint16
| | +--ro vrf-name             -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name {feature-list:HAVE_VRF}?
| | +--ro router-id?           inet:ipv4-address
| | +--ro flood-reduction?     empty

```

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```

| | +--ro rfc1583-compatibility?    empty
| | +--ro database-summary?        empty
| | +--ro bfd-enable-all-interfaces? empty {feature-list:HAVE_BFD}?
| | +--ro log-adjacency-changes?    ipi-ospf-types:ospf_log_adj_opt_t
| | +--ro shutdown?                empty
| | +--ro area-border-type?         ipi-ospf-types:ospf_abr_type_t
| | +--ro reference-bandwidth?      uint32
| | +--ro max-database-descriptors? uint16
| | +--ro p2p-rfc-incompatible?     empty
| | +--ro context-name?             string
| | +--ro dste-status?              ipi-ospf-types:ospf_dste_status
| +--ro link-state-database
| | +--ro state
| |   +--ro external-checksum? yang:phys-address
| |   +--ro opaque-checksum?   yang:phys-address
| +--rw passive-interfaces
| | +--rw config
| | | +--rw passive-interface-all? empty
| | +--ro state
| | | +--ro passive-interface-all? empty
| | +--rw passive-interface* [name]
| |   +--rw name                -> ../config/name
| |   +--rw config
| | | +--rw name?               -> /ipi-interface:interfaces/interface/name
| | | +--rw passive-mode?       ipi-ospf-types:ospf_passive_mode_t
| | +--ro state
| | | +--ro name?               -> /ipi-interface:interfaces/interface/name
| | | +--ro passive-mode?       ipi-ospf-types:ospf_passive_mode_t
| | +--rw passive-addresses
| |   +--rw passive-address* [address]
| |     +--rw address           -> ../config/address
| |     +--rw config
| | | +--rw address?            inet:ipv4-address
| | | +--rw passive-mode        ipi-ospf-types:ospf_passive_addr_mode_t
| | +--ro state
| |   +--ro address?            inet:ipv4-address

```

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```

| |      +-ro passive-mode   ipi-ospf-types:ospf_passive_addr_mode_t
| +-rw default-information
| | +-rw config
| | | +-rw originate?        empty
| | | +-rw always-advertise-default-route? empty
| | | +-rw metric?           uint32
| | | +-rw metric-type?      ipi-ospf-types:ospf_metric_type_t
| | | +-rw route-map?        string
| | +-ro state
| |   +-ro originate?        empty
| |   +-ro always-advertise-default-route? empty
| |   +-ro metric?           uint32
| |   +-ro metric-type?      ipi-ospf-types:ospf_metric_type_t
| |   +-ro route-map?        string
| +-rw capability
| | +-rw config
| | | +-rw enable-vrf-lite?    empty {feature-list:HAVE_VRF_OSPF}?
| | | +-rw disable-opaque-lsa? empty {feature-list:HAVE_OPAQUE_LSA}?
| | | +-rw disable-graceful-restart? empty {feature-list:HAVE_RESTART}?
| | | +-rw link-local-signaling? empty {feature-list:HAVE_RESTART}?
| | +-ro state
| |   +-ro enable-vrf-lite?    empty {feature-list:HAVE_VRF_OSPF}?
| |   +-ro disable-opaque-lsa? empty {feature-list:HAVE_OPAQUE_LSA}?
| |   +-ro disable-graceful-restart? empty {feature-list:HAVE_RESTART}?
| |   +-ro link-local-signaling? empty {feature-list:HAVE_RESTART}?
| +-rw areas
| | +-rw area* [area-id]
| | | +-rw area-id    -> ../config/area-id
| | | +-rw config
| | | | +-rw area-id?      ipi-ospf-types:ospf_area_t
| | | | +-rw authentication-type? ipi-ospf-types:ospf_area_authentication_type_t
| | | | +-rw default-cost?   uint32
| | | | +-rw shortcut?       ipi-ospf-types:ospf_area_shortcut_type_t
| | | +-ro state
| | | | +-ro area-id?        ipi-ospf-types:ospf_area_t
| | | | +-ro authentication-type? ipi-ospf-types:ospf_area_authentication_type_t

```

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```

| | | +--ro default-cost?      uint32
| | | +--ro shortcut?         ipi-ospf-types:ospf_area_shortcut_type_t
| | | +--ro interface-count?   yang:counter64
| | | +--ro neighbor-count?    yang:counter64
| | | +--ro spf-last-execution-time? string
| | | +--ro spf-execution-count? yang:counter64
| | | +--ro lsa-count?         yang:counter64
| | | +--ro lsa-checksum?      yang:phys-address
| | +--rw interfaces
| | | +--rw interface* [name]
| | |   +--rw name      -> ../config/name
| | |   +--rw config
| | |     | +--rw name?      string
| | |     | +--rw cost?      uint16
| | |     | +--rw network-type? ipi-ospf-types:ospf_network_t
| | |     | +--rw passive?    empty
| | |     | +--rw priority?   uint8
| | |     | +--rw authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | |     | +--rw key?        ipi-ospf-types:ospf_md5_password_t
| | |     +--ro state
| | |       | +--ro name?      string
| | |       | +--ro cost?      uint16
| | |       | +--ro network-type? ipi-ospf-types:ospf_network_t
| | |       | +--ro passive?    empty
| | |       | +--ro priority?   uint8
| | |       | +--ro authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | |       | +--ro key?        ipi-ospf-types:ospf_md5_password_t
| | |       +--rw enable-bfd {feature-list:HAVE_BFD}?
| | |       | +--rw config
| | |       | | +--rw enabled? ipi-ospf-types:ospf_bfd_state
| | |       | | +--ro state
| | |       |   +--ro enabled? ipi-ospf-types:ospf_bfd_state
| | |       +--rw lsa-filter
| | |       | +--rw config
| | |       | | +--rw filter-out? empty
| | |       | +--ro state

```

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```

|   |   |   |   |   +--ro filter-out?  empty
|   |   |   |   |   +--rw mpls
|   |   |   |   |   +--rw config
|   |   |   |   |   +--ro state
|   |   |   |   |   +--rw igp-ldp-sync
|   |   |   |   |   +--rw config
|   |   |   |   |   +--ro state
|   |   |   |   |   +--rw timers
|   |   |   |   |   +--rw config
|   |   |   |   |   | +--rw dead-interval?      uint16
|   |   |   |   |   | +--rw hello-interval?      uint16
|   |   |   |   |   | +--rw retransmission-interval? uint16
|   |   |   |   |   +--ro state
|   |   |   |   |   | +--ro dead-interval?      uint16
|   |   |   |   |   | +--ro hello-interval?      uint16
|   |   |   |   |   | +--ro retransmission-interval? uint16
|   |   |   |   |   +--rw stub
|   |   |   |   |   +--rw config
|   |   |   |   |   | +--rw is-stub?  empty
|   |   |   |   |   | +--rw no-summary? empty
|   |   |   |   |   +--ro state
|   |   |   |   |   +--ro is-stub?  empty
|   |   |   |   |   +--ro no-summary? empty
|   |   |   |   |   +--rw nssas {feature-list:HAVE_NSSA}?
|   |   |   |   |   +--rw nssa* [nssa-enable]
|   |   |   |   |   +--rw nssa-enable  -> ../config/nssa-enable
|   |   |   |   |   +--rw config
|   |   |   |   |   | +--rw nssa-enable?      ipi-ospf-types:ospf_nssa_t
|   |   |   |   |   | +--rw no-summary?      empty
|   |   |   |   |   | +--rw stability-interval? uint32
|   |   |   |   |   | +--rw translator-role?   ipi-ospf-types:ospf_translator_role_t
|   |   |   |   |   | +--rw no-redistribution?  empty
|   |   |   |   |   | +--rw default-information-originate? empty
|   |   |   |   |   | +--rw metric?            uint32
|   |   |   |   |   | +--rw metric-type?       ipi-ospf-types:ospf_metric_type_t
|   |   |   |   |   | +--rw route-map?         string

```

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```

|   |   |   +--ro state
|   |   |   +--ro nssa-enable?          ipi-ospf-types:ospf_nssa_t
|   |   |   +--ro no-summary?           empty
|   |   |   +--ro stability-interval?    uint32
|   |   |   +--ro translator-role?       ipi-ospf-types:ospf_translator_role_t
|   |   |   +--ro no-redistribution?      empty
|   |   |   +--ro default-information-originate? empty
|   |   |   +--ro metric?                uint32
|   |   |   +--ro metric-type?           ipi-ospf-types:ospf_metric_type_t
|   |   |   +--ro route-map?             string
|   |   |   +--ro translator-count?      yang:counter64
|   |   |   +--ro translator-state?      ipi-ospf-types:ospf_nssa_translator_state_t
|   |   +--rw filter-list {feature-list:HAVE_ACL}?
|   |   +--rw prefix-list {feature-list:HAVE_ACL}?
|   |   |   +--rw filter-in
|   |   |   |   +--rw config
|   |   |   |   |   +--rw name? string
|   |   |   |   |   +--ro state
|   |   |   |   |   |   +--ro name? string
|   |   |   |   |   +--rw filter-out
|   |   |   |   |   |   +--rw config
|   |   |   |   |   |   |   +--rw name? string
|   |   |   |   |   |   |   +--ro state
|   |   |   |   |   |   |   |   +--ro name? string
|   |   |   +--rw access-control-list {feature-list:HAVE_ACL}?
|   |   |   |   +--rw filter-in
|   |   |   |   |   +--rw config
|   |   |   |   |   |   +--rw name? string
|   |   |   |   |   |   +--ro state
|   |   |   |   |   |   |   +--ro name? string
|   |   |   +--rw filter-out
|   |   |   |   +--rw config
|   |   |   |   |   +--rw name? string
|   |   |   |   |   +--ro state
|   |   |   |   |   |   +--ro name? string
|   |   +--rw hosts

```



```

| | | +--rw host* [ip-address]
| | |   +--rw ip-address  -> ../config/ip-address
| | |   +--rw config
| | |     | +--rw ip-address?  inet:ipv4-address
| | |     | +--rw cost?       uint16
| | |     +--ro state
| | |       +--ro ip-address?  inet:ipv4-address
| | |       +--ro cost?       uint16
| | +--rw networks
| | | +--rw network* [prefix]
| | |   +--rw prefix  -> ../config/prefix
| | |   +--rw config
| | |     | +--rw prefix?      cml-data-types:cml_ipv4_prefix_t
| | |     | +--rw instance-id  uint8 {feature-list:HAVE_OSPF_MULTI_INST}?
| | |     +--ro state
| | |       +--ro prefix?      cml-data-types:cml_ipv4_prefix_t
| | |       +--ro instance-id  uint8 {feature-list:HAVE_OSPF_MULTI_INST}?
| | +--rw area-ranges
| | | +--rw area-range* [address]
| | |   +--rw address  -> ../config/address
| | |   +--rw config
| | |     | +--rw address?      cml-data-types:cml_ipv4_prefix_t
| | |     | +--rw disable-advertise?  empty
| | |     +--ro state
| | |       +--ro address?      cml-data-types:cml_ipv4_prefix_t
| | |       +--ro disable-advertise?  empty
| | +--rw virtual-links
| | | +--rw virtual-link* [remote-router-id]
| | |   +--rw remote-router-id          -> ../config/remote-router-id
| | |   +--rw config
| | |     | +--rw remote-router-id?  inet:ipv4-address
| | |     +--ro state
| | |       | +--ro remote-router-id?  inet:ipv4-address
| | |       | +--ro name?              string
| | |       | +--ro interface?         string
| | |       | +--ro virtual-link-interface-state?  ipi-ospf-types:ospf_vlink_interface_state_t

```

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```

| | | | +--ro link-state?          ipi-ospf-types:ospf_vlink_status_t
| | | | +--ro adjacency-state?      ipi-ospf-types:ospf_vlink_adj_state_t
| | | | +--ro hello-packet-due-in?   string
| | | | +--ro local-address?         cml-data-types:cml_ipv4_prefix_t
| | | | +--ro remote-address?        cml-data-types:cml_ipv4_prefix_t
| | | | +--rw bfd
| | | | +--rw config
| | | | | +--rw fall-over?  empty {feature-list:HAVE_BFD}?
| | | | | +--ro state
| | | | |   +--ro fall-over?  empty {feature-list:HAVE_BFD}?
| | | | +--rw authentication
| | | | | +--rw config
| | | | | | +--rw authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | | | | | +--rw key?                ipi-ospf-types:ospf_md5_password_t
| | | | | | +--ro state
| | | | | | +--ro authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | | | | | +--ro key?                ipi-ospf-types:ospf_md5_password_t
| | | | | +--rw message-digests
| | | | | | +--rw message-digest* [message-digest-id]
| | | | | |   +--rw message-digest-id  -> ../config/message-digest-id
| | | | | |   +--rw config
| | | | | | | +--rw message-digest-id?      uint8
| | | | | | | +--rw message-digest-encryption-type ipi-ospf-types:ospf_cipher_type_t
| | | | | | | +--rw message-digest-key      ipi-ospf-types:ospf_md5_password_t
| | | | | | +--ro state
| | | | | |   +--ro message-digest-id?      uint8
| | | | | |   +--ro message-digest-encryption-type ipi-ospf-types:ospf_cipher_type_t
| | | | | |   +--ro message-digest-key      ipi-ospf-types:ospf_md5_password_t
| | | | +--rw timers
| | | | | +--rw config
| | | | | | +--rw dead-interval?      uint16
| | | | | | +--rw hello-interval?    uint16
| | | | | | +--rw transmit-delay?    uint16
| | | | | | +--rw retransmission-interval? uint16
| | | | | | +--ro state
| | | | |   +--ro dead-interval?      uint16

```

---

```

| | | | +--ro hello-interval?      uint16
| | | | +--ro transmit-delay?      uint16
| | | | +--ro retransmission-interval? uint16
| | | +--ro virtual-link-interface-state-change
| | | | +--ro router-id?      inet:ipv4-address
| | | | +--ro interface-state? ipi-ospf-types:ospf_interface_state_t
| | | +--ro virtual-neighbor-state-change
| | | | +--ro router-id?      inet:ipv4-address
| | | | +--ro neighbor-state? ipi-ospf-types:ospf_neighbor_state_change_t
| | | +--ro virtual-link-interface-rx-bad-packet
| | | | +--ro router-id?      inet:ipv4-address
| | | | +--ro packet-type? ipi-ospf-types:ospf_packet_type_t
| | | +--ro virtual-link-interface-tx-retransmit
| | | | +--ro router-id?      inet:ipv4-address
| | | | +--ro packet-type? ipi-ospf-types:ospf_packet_type_t
| | | | +--ro lsdb-type?      ipi-ospf-types:ospf_lsdb_type_t
| | | | +--ro lsdb-lsid?      inet:ipv4-address
| | | | +--ro lsdb-router-id? inet:ipv4-address
| | | +--ro virtual-link-interface-config-error
| | |   +--ro router-id?      inet:ipv4-address
| | |   +--ro error-type? ipi-ospf-types:ospf_config_error_type_t
| | |   +--ro packet-type? ipi-ospf-types:ospf_packet_type_t
| | +--rw config
| | | +--rw maximum-areas-number? uint32
| | +--ro state
| |   +--ro maximum-areas-number? uint32
| +--rw lsdb
| | +--rw overflow
| |   +--rw normal-lsa
| |     +--rw config!
| |       | +--rw max-limit      uint32
| |       | +--rw limit-type ipi-ospf-types:ospf_db_limit_type_t
| |       | +--ro state
| |       |   +--ro max-limit      uint32
| |       |   +--ro limit-type ipi-ospf-types:ospf_db_limit_type_t
| |       +--rw external-lsa {feature-list:HAVE_OSPF_DB_OVERFLOW}?

```

```

| | | +--rw config!
| | | | +--rw max-limit      uint32
| | | | +--rw exit-interval  uint16
| | | +--ro state
| | |   +--ro max-limit      uint32
| | |   +--ro exit-interval  uint16
| | +--ro lsdb-overflow-external-lsa
| |   +--ro router-id? -> /ospfv2/processes/process/state/router-id
| |   +--ro max-limit?  uint32
| +--rw lfa {feature-list:HAVE_OSPF_LFA}?
| | +--rw fast-reroute
| |   +--rw config
| | | +--rw keep-all-paths? empty
| | | +--rw route-map?      string
| | +--ro state
| | | +--ro keep-all-paths? empty
| | | +--ro route-map?      string
| | +--rw tie-breaks
| | | +--rw tie-break* [type]
| | |   +--rw type -> ../config/type
| | |   +--rw config
| | | | +--rw type? ipi-ospf-types:ospf_frr_tie_break_t
| | | | +--rw idx   uint8
| | | +--ro state
| | |   +--ro type? ipi-ospf-types:ospf_frr_tie_break_t
| | |   +--ro idx   uint8
| | +--rw topologies-independent-lfa
| +--rw administrative-distance
| | +--rw config
| | | +--rw default-distance? uint8
| | +--ro state
| | | +--ro default-distance? uint8
| | +--rw ospf
| | | +--rw config
| | | | +--rw intra-area-distance? uint8
| | | | +--rw inter-area-distance? uint8

```

---

```

| | | +--rw external-routes-distance? uint8
| | +--ro state
| | | +--ro intra-area-distance? uint8
| | | +--ro inter-area-distance? uint8
| | | +--ro external-routes-distance? uint8
| | +--rw networks
| |   +--rw network* [prefix]
| |     +--rw prefix -> ../config/prefix
| |     +--rw config
| |       | +--rw prefix? cml-data-types:cml_ipv4_addr_prefix_t
| |       | +--rw distance? uint8
| |       | +--rw access-control-list? string
| |       +--ro state
| |         +--ro prefix? cml-data-types:cml_ipv4_addr_prefix_t
| |         +--ro distance? uint8
| |         +--ro access-control-list? string
| +--rw summary-addresses
| | +--rw summary-address* [address]
| |   +--rw address -> ../config/address
| |   +--rw config
| |     | +--rw address? cml-data-types:cml_ipv4_prefix_t
| |     | +--rw not-advertise? empty
| |     | +--rw tag? uint32
| |     +--ro state
| |       +--ro address? cml-data-types:cml_ipv4_prefix_t
| |       +--ro not-advertise? empty
| |       +--ro tag? uint32
| +--rw distribute-list {feature-list:HAVE_ACL}?
| | +--rw filter-in
| | | +--rw config
| | | | +--rw access-control-list? string
| | | +--ro state
| | |   +--ro access-control-list? string
| | +--rw filter-out
| |   +--rw config
| | | +--rw access-control-list-isis? string

```

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```

| | | +--rw access-control-list-bgp?    string
| | | +--rw access-control-list-rip?    string
| | | +--rw access-control-list-static?  string
| | | +--rw access-control-list-connected? string
| | | +--rw access-control-list-kernel?  string
| | +--ro state
| | | +--ro access-control-list-isis?    string
| | | +--ro access-control-list-bgp?     string
| | | +--ro access-control-list-rip?     string
| | | +--ro access-control-list-static?   string
| | | +--ro access-control-list-connected? string
| | | +--ro access-control-list-kernel?   string
| | +--rw ospfv2-processes
| |   +--rw ospfv2-process* [ospf-process-id]
| |     +--rw ospf-process-id  -> ../config/ospf-process-id
| |     +--rw config
| |       | +--rw ospf-process-id?          uint16
| |       | +--rw access-control-list-out-ospf? string
| |       +--ro state
| |         +--ro ospf-process-id?          uint16
| |         +--ro access-control-list-out-ospf? string
| +--rw domain-id
| | +--rw primary-domain {feature-list:HAVE_VRF_OSPF}?
| | | +--rw config
| | | | +--rw primary-domain-id-address?  inet:ipv4-address
| | | +--ro state
| | | | +--ro primary-domain-id-address?  inet:ipv4-address
| | | +--rw hexes
| | | | +--rw hex* [primary-hex-type primary-domain-id-hex] {feature-list:HAVE_VRF_OSPF}?
| | | |   +--rw primary-hex-type      -> ../config/primary-hex-type
| | | |   +--rw primary-domain-id-hex -> ../config/primary-domain-id-hex
| | | |   +--rw config
| | | | | +--rw primary-hex-type?      ipi-ospf-types:ospf_domain_type_t
| | | | | +--rw primary-domain-id-hex? ipi-ospf-types:ospf_domain_id_hex_string_t
| | | | +--ro state
| | | |   +--ro primary-hex-type?      ipi-ospf-types:ospf_domain_type_t

```

```

| | |      +--ro primary-domain-id-hex?  ipi-ospf-types:ospf_domain_id_hex_string_t
| | +--rw secondary-domain
| |   +--rw addresses
| |     +--rw address* [secondary-domain-id-address] {feature-list:HAVE_VRF_OSPF}?
| |     +--rw secondary-domain-id-address  -> ../config/secondary-domain-id-address
| |     +--rw config
| |       | +--rw secondary-domain-id-address?  inet:ipv4-address
| |       +--ro state
| |       +--ro secondary-domain-id-address?  inet:ipv4-address
| |   +--rw hexes
| |     +--rw hex* [secondary-hex-type secondary-domain-id-hex] {feature-list:HAVE_VRF_OSPF}?
| |     +--rw secondary-hex-type      -> ../config/secondary-hex-type
| |     +--rw secondary-domain-id-hex  -> ../config/secondary-domain-id-hex
| |     +--rw config
| |       | +--rw secondary-hex-type?      ipi-ospf-types:ospf_domain_type_t
| |       | +--rw secondary-domain-id-hex? ipi-ospf-types:ospf_domain_id_hex_string_t
| |       +--ro state
| |       +--ro secondary-hex-type?      ipi-ospf-types:ospf_domain_type_t
| |       +--ro secondary-domain-id-hex? ipi-ospf-types:ospf_domain_id_hex_string_t
| +--rw neighbors
| | +--rw neighbor* [address]
| |   +--rw address      -> ../config/address
| |   +--rw config
| |     +--rw address?    inet:ipv4-address
| |     +--rw cost?       uint16
| |     +--rw priority?   uint8
| |     +--rw poll-interval? uint32
| |   +--ro state
| |     +--ro address?    inet:ipv4-address
| |     +--ro cost?       uint16
| |     +--ro priority?   uint8
| |     +--ro poll-interval? uint32
| |   +--ro neighbor-state-change
| |     +--ro router-id?      inet:ipv4-address
| |     +--ro address?        inet:ipv4-address
| |     +--ro neighbor-address-less-index? uint32

```

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```

| | | +--ro neighbor-router-id?      inet:ipv4-address
| | | +--ro neighbor-state?          ipi-ospf-types:ospf_neighbor_state_change_t
| | +--ro tx-retransmit
| |   +--ro router-id?               inet:ipv4-address
| |   +--ro address?                 inet:ipv4-address
| |   +--ro neighbor-address-less-index? uint32
| |   +--ro neighbor-router-id?      inet:ipv4-address
| |   +--ro packet-type?             ipi-ospf-types:ospf_packet_type_t
| |   +--ro lsdb-type?               ipi-ospf-types:ospf_lsdb_type_t
| |   +--ro lsdb-lsid?               inet:ipv4-address
| |   +--ro lsdb-router-id?          inet:ipv4-address
| +--rw timers
| | +--rw config
| | +--ro state
| | +--rw lfa
| | | +--rw config
| | | | +--rw termination-hold-interval? uint32 {feature-list:HAVE_OSPF_LFA}?
| | | | +--ro state
| | | | +--ro termination-hold-interval? uint32 {feature-list:HAVE_OSPF_LFA}?
| | | +--rw lsa
| | | | +--rw config
| | | | | +--rw min-arrival-interval? uint32
| | | | | +--ro state
| | | | | +--ro min-arrival-interval? uint32
| | | | +--rw delays
| | | | | +--rw delay* [start-delay min-delay max-delay]
| | | | |   +--rw start-delay  -> ../config/start-delay
| | | | |   +--rw min-delay    -> ../config/min-delay
| | | | |   +--rw max-delay    -> ../config/max-delay
| | | | |   +--rw config
| | | | | | +--rw start-delay? uint32
| | | | | | +--rw min-delay?  uint32
| | | | | | +--rw max-delay?  uint32
| | | | | +--ro state
| | | | |   +--ro start-delay? uint32
| | | | |   +--ro min-delay?  uint32

```

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```

| | |      +--ro max-delay?   uint32
| | +--rw spf
| |   +--rw delay
| |     +--rw config!
| |       | +--rw min-delay   uint32
| |       | +--rw max-delay   uint32
| |       +--ro state
| |         +--ro min-delay   uint32
| |         +--ro max-delay   uint32
| +--rw redistribute
| | +--rw config
| | | +--rw default-metric?   uint32
| | | +--ro state
| | | +--ro default-metric?   uint32
| | +--rw routing-protocols
| | | +--rw routing-protocol* [protocol]
| | |   +--rw protocol -> ../config/protocol
| | |   +--rw config
| | |     | +--rw metric?      uint32
| | |     | +--rw metric-type? ipi-ospf-types:ospf_metric_type_t
| | |     | +--rw route-map?   string
| | |     | +--rw tag?         uint32
| | |     | +--rw protocol?    ipi-ospf-types:ospf_route_source_type_t
| | |     +--ro state
| | |       +--ro metric?      uint32
| | |       +--ro metric-type? ipi-ospf-types:ospf_metric_type_t
| | |       +--ro route-map?   string
| | |       +--ro tag?         uint32
| | |       +--ro protocol?    ipi-ospf-types:ospf_route_source_type_t
| | +--rw ospf-processes
| | | +--rw ospf-process* [ospf-process-id]
| | |   +--rw ospf-process-id -> ../config/ospf-process-id
| | |   +--rw config
| | |     | +--rw metric?      uint32
| | |     | +--rw metric-type? ipi-ospf-types:ospf_metric_type_t
| | |     | +--rw route-map?   string

```

```

| | | | +--rw tag?          uint32
| | | | +--rw ospf-process-id? uint16
| | | | +--ro state
| | | |   +--ro metric?      uint32
| | | |   +--ro metric-type?  ipi-ospf-types:ospf_metric_type_t
| | | |   +--ro route-map?    string
| | | |   +--ro tag?          uint32
| | | |   +--ro ospf-process-id? uint16
| | +--rw isis-processes
| |   +--rw isis-process* [isis-process-id]
| |     +--rw isis-process-id -> ../config/isis-process-id
| |     +--rw config
| |       | +--rw metric?      uint32
| |       | +--rw metric-type? ipi-ospf-types:ospf_metric_type_t
| |       | +--rw route-map?    string
| |       | +--rw tag?          uint32
| |       | +--rw isis-process-id? string
| |       +--ro state
| |         +--ro metric?      uint32
| |         +--ro metric-type? ipi-ospf-types:ospf_metric_type_t
| |         +--ro route-map?    string
| |         +--ro tag?          uint32
| |         +--ro isis-process-id? string
| +--ro originate-lsa
| | +--ro router-id?    -> /ospfv2/processes/process/state/router-id
| | +--ro lsdb-area-id? inet:ipv4-address
| | +--ro lsdb-type?    ipi-ospf-types:ospf_lsdb_type_t
| | +--ro lsdb-id?      inet:ipv4-address
| | +--ro lsdb-router-id? inet:ipv4-address
| +--rw max-metric {feature-list:HAVE_OSPF_STUB_ROUTER}?
| | +--rw config!
| | | +--rw enable-max-router-lsa empty
| | | +--rw max-external-lsa?    uint32
| | | +--rw max-summary-lsa?     uint32
| | | +--rw include-stub?        empty
| | +--ro state

```

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```

| | +--ro enable-max-router-lsa  empty
| | +--ro max-external-lsa?      uint32
| | +--ro max-summary-lsa?      uint32
| | +--ro include-stub?         empty
| +--rw max-metric-on-startup {feature-list:HAVE_OSPF_STUB_ROUTER}?
|   +--rw config!
|     | +--rw max-on-startup      uint32
|     | +--rw max-on-startup-external-lsa?  uint32
|     | +--rw max-on-startup-summary-lsa?  uint32
|     | +--rw on-startup-include-stub?  empty
|     +--ro state
|       +--ro max-on-startup      uint32
|       +--ro max-on-startup-external-lsa?  uint32
|       +--ro max-on-startup-summary-lsa?  uint32
|       +--ro on-startup-include-stub?  empty
+--rw multi-area-interfaces {feature-list:HAVE_OSPF_MULTI_AREA}?
| +--rw multi-area-interface* [name]
|   +--rw name      -> ../config/name
|   +--rw config
|     | +--rw name? -> /ipi-interface:interfaces/interface/name
|     +--ro state
|       | +--ro name? -> /ipi-interface:interfaces/interface/name
|       +--rw ospfv2-processes
|         +--rw ospfv2-process* [ospf-process-id]
|           +--rw ospf-process-id      -> ../config/ospf-process-id
|           +--rw config
|             | +--rw ospf-process-id?  uint16
|             +--ro state
|               | +--ro ospf-process-id?  uint16
|               +--rw multi-areas
|                 | +--rw multi-area* [area-id]
|                 |   +--rw area-id      -> ../config/area-id
|                 |   +--rw config
|                 |     | +--rw area-id?  ipi-ospf-types:ospf_area_t
|                 |     +--ro state
|                 |       +--ro area-id?  ipi-ospf-types:ospf_area_t

```

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```

|      +--rw multi-areas-neighbors
|      +--rw multi-area-neighbor* [area-id]
|      +--rw area-id   -> ../config/area-id
|      +--rw config
|      | +--rw area-id?   ipi-ospf-types:ospf_area_t
|      | +--rw neighbor   inet:ipv4-address
|      +--ro state
|      +--ro area-id?   ipi-ospf-types:ospf_area_t
|      +--ro neighbor   inet:ipv4-address
+--rw debug
| +--rw config
| | +--rw bfd?           empty {feature-list:HAVE_BFD}?
| | +--rw rate-limit?    empty
| | +--rw route?         ipi-ospf-types:ospf_debug_route_t
| | +--rw rib?           ipi-ospf-types:ospf_debug_rib_t {feature-list:HAVE_RIBD}?
| | +--rw nsm?           ipi-ospf-types:ospf_debug_nsm_t
| | +--rw nfsm?          ipi-ospf-types:ospf_debug_nfsm_t
| | +--rw lsa?           ipi-ospf-types:ospf_debug_lsa_t
| | +--rw ifsm?          ipi-ospf-types:ospf_debug_ifsm_t
| | +--rw events?        ipi-ospf-types:ospf_debug_event_t
| | +--rw retransmission? empty
| | +--rw lfa?           empty {feature-list:HAVE_OSPF_LFA}?
| | +--rw policy?        empty
| | +--rw redistribute?  ipi-ospf-types:ospf_debug_redist_t
| | +--rw graceful-restart? ipi-ospf-types:ospf_debug_graceful_t
| | +--rw packet-hello?   ipi-ospf-types:ospf_debug_packet_options_t
| | +--rw packet-dd?      ipi-ospf-types:ospf_debug_packet_options_t
| | +--rw packet-ls-request? ipi-ospf-types:ospf_debug_packet_options_t
| | +--rw packet-ls-update? ipi-ospf-types:ospf_debug_packet_options_t
| | +--rw packet-ls-ack?   ipi-ospf-types:ospf_debug_packet_options_t
| +--ro state
| +--ro bfd?             empty {feature-list:HAVE_BFD}?
| +--ro rate-limit?      empty
| +--ro route?           ipi-ospf-types:ospf_debug_route_t
| +--ro rib?             ipi-ospf-types:ospf_debug_rib_t {feature-list:HAVE_RIBD}?
| +--ro nsm?             ipi-ospf-types:ospf_debug_nsm_t

```

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```

|  +--ro nfm?          ipi-ospf-types:ospf_debug_nfm_t
|  +--ro lsa?          ipi-ospf-types:ospf_debug_lsa_t
|  +--ro ifsm?         ipi-ospf-types:ospf_debug_ifsm_t
|  +--ro events?       ipi-ospf-types:ospf_debug_event_t
|  +--ro retransmission? empty
|  +--ro lfa?          empty {feature-list:HAVE_OSPF_LFA}?
|  +--ro policy?       empty
|  +--ro redistribute? ipi-ospf-types:ospf_debug_redist_t
|  +--ro graceful-restart? ipi-ospf-types:ospf_debug_graceful_t
|  +--ro packet-hello? ipi-ospf-types:ospf_debug_packet_options_t
|  +--ro packet-dd?    ipi-ospf-types:ospf_debug_packet_options_t
|  +--ro packet-ls-request? ipi-ospf-types:ospf_debug_packet_options_t
|  +--ro packet-ls-update? ipi-ospf-types:ospf_debug_packet_options_t
|  +--ro packet-ls-ack? ipi-ospf-types:ospf_debug_packet_options_t
|  +--ro terminal-debug-status
|    +--ro bfd?        cml-data-types:cml_on_off_t {feature-list:HAVE_BFD}?
|    +--ro rate-limit? cml-data-types:cml_on_off_t
|    +--ro route?      ipi-ospf-types:ospf_debug_route_t
|    +--ro rib?        ipi-ospf-types:ospf_debug_rib_t {feature-list:HAVE_RIBD}?
|    +--ro nsm?        ipi-ospf-types:ospf_debug_nsm_t
|    +--ro nfm?        ipi-ospf-types:ospf_debug_nfm_t
|    +--ro lsa?        ipi-ospf-types:ospf_debug_lsa_t
|    +--ro ifsm?       ipi-ospf-types:ospf_debug_ifsm_t
|    +--ro events?     ipi-ospf-types:ospf_debug_event_t
|    +--ro retransmission? cml-data-types:cml_on_off_t
|    +--ro lfa?        cml-data-types:cml_on_off_t {feature-list:HAVE_OSPF_LFA}?
|    +--ro policy?     cml-data-types:cml_on_off_t
|    +--ro redistribute? ipi-ospf-types:ospf_debug_redist_t
|    +--ro graceful-restart? ipi-ospf-types:ospf_debug_graceful_t
|    +--ro packet-hello? ipi-ospf-types:ospf_debug_packet_options_t
|    +--ro packet-dd?   ipi-ospf-types:ospf_debug_packet_options_t
|    +--ro packet-ls-request? ipi-ospf-types:ospf_debug_packet_options_t
|    +--ro packet-ls-update? ipi-ospf-types:ospf_debug_packet_options_t
|    +--ro packet-ls-ack? ipi-ospf-types:ospf_debug_packet_options_t
+--rw interfaces
  +--rw interface* [name]

```

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```

+--rw name          -> ../config/name
+--rw config
| +--rw cost?        uint16
| +--rw priority?    uint8
| +--rw mtu-ignore?   empty
| +--rw name?        -> /ipi-interface:interfaces/interface/name
| +--rw network-type? ipi-ospf-types:ospf_network_t
| +--rw disable-all-ospf? empty
| +--rw mtu?          uint16
| +--rw enable-flood-reduction? empty
| +--rw enable-demand-circuit? empty {feature-list:HAVE_OSPF_OD,feature-list:HAVE_OSPF_MULTI_INST}?
| +--rw enable-bfd?   ipi-ospf-types:ospf_bfd_state {feature-list:HAVE_BFD}?
| +--rw disable-fast-reroute? empty {feature-list:HAVE_OSPF_LFA}?
+--ro state
| +--ro cost?        uint16
| +--ro priority?    uint8
| +--ro mtu-ignore?   empty
| +--ro name?        -> /ipi-interface:interfaces/interface/name
| +--ro network-type? ipi-ospf-types:ospf_network_t
| +--ro disable-all-ospf? empty
| +--ro mtu?          uint16
| +--ro enable-flood-reduction? empty
| +--ro enable-demand-circuit? empty {feature-list:HAVE_OSPF_OD,feature-list:HAVE_OSPF_MULTI_INST}?
| +--ro enable-bfd?   ipi-ospf-types:ospf_bfd_state {feature-list:HAVE_BFD}?
| +--ro disable-fast-reroute? empty {feature-list:HAVE_OSPF_LFA}?
| +--ro link-state-change
| | +--ro router-id?    inet:ipv4-address
| | +--ro name?         string
| | +--ro interface-address? inet:ipv4-address
| | +--ro address-less-interface? uint32
| | +--ro interface-state? ipi-ospf-types:ospf_interface_state_t
| +--ro rx-bad-packet
| | +--ro router-id?    inet:ipv4-address
| | +--ro name?         string
| | +--ro interface-address? inet:ipv4-address
| | +--ro address-less-interface? uint32

```

---

```

| | +--ro packet-src?          inet:ipv4-address
| | +--ro packet-type?        ipi-ospf-types:ospf_packet_type_t
| +--ro interface-config-error
|   +--ro router-id?          inet:ipv4-address
|   +--ro name?               string
|   +--ro interface-address?   inet:ipv4-address
|   +--ro address-less-interface? uint32
|   +--ro error-type?          ipi-ospf-types:ospf_config_error_type_t
|   +--ro packet-type?        ipi-ospf-types:ospf_packet_type_t
+--ro interface-states
| +--ro state
| | +--ro interface-state?     int32
| | +--ro lsa-count?          int32
| | +--ro lsa-checksum?       int32
| | +--ro interface-events?    int32
| | +--ro addressless-interface? int32
| +--ro statistics
| | +--ro errors
| | | +--ro discarded-in?      yang:counter64
| | | +--ro discarded-out?     yang:counter64
| | | +--ro hello-in?         yang:counter64
| | | +--ro database-descriptor-in? yang:counter64
| | | +--ro ls-request-in?     yang:counter64
| | | +--ro ls-update-in?      yang:counter64
| | | +--ro ls-acknowledge-in?  yang:counter64
| | | +--ro unknown-in?       yang:counter64
| | | +--ro unknown-out?      yang:counter64
| | | +--ro bad-version?       yang:counter64
| | | +--ro bad-crc?          yang:counter64
| | | +--ro invalid-source?    yang:counter64
| | | +--ro invalid-destination? yang:counter64
| | | +--ro no-neighbor?       yang:counter64
| | | +--ro passive?          yang:counter64
| | | +--ro wrong-area?        yang:counter64
| | | +--ro packet-length?     yang:counter64
| | | +--ro authentication?    yang:counter64

```

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```

| | +--ro traffic
| |   +--ro total-packets-in?          yang:counter64
| |   +--ro total-packets-out?         yang:counter64
| |   +--ro hello-packets-in?          yang:counter64
| |   +--ro hello-packets-out?         yang:counter64
| |   +--ro database-descriptor-packets-in? yang:counter64
| |   +--ro database-descriptor-packets-out? yang:counter64
| |   +--ro ls-request-packets-in?      yang:counter64
| |   +--ro ls-request-packets-out?     yang:counter64
| |   +--ro ls-update-packets-in?       yang:counter64
| |   +--ro ls-update-packets-out?      yang:counter64
| |   +--ro ls-acknowledge-packets-in?   yang:counter64
| |   +--ro ls-acknowledge-packets-out?  yang:counter64
| +--ro designated-router
| | +--ro state
| |   +--ro router-id?  inet:ipv4-address
| |   +--ro address?    inet:ipv4-address
| +--ro backup-designated-router
| | +--ro state
| |   +--ro router-id?  inet:ipv4-address
| |   +--ro address?    inet:ipv4-address
| +--ro timers
| | +--ro state
| |   +--ro runtime-dead-interval? uint32
+--rw authentication
| +--rw config
| | +--rw authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | +--rw key?                  ipi-ospf-types:ospf_md5_password_t
| | +--ro state
| |   +--ro authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| |   +--ro key?                  ipi-ospf-types:ospf_md5_password_t
| +--rw message-digests
| | +--rw message-digest* [message-digest-id]
| |   +--rw message-digest-id -> ../config/message-digest-id
| |   +--rw config
| |     | +--rw message-digest-id?          uint8

```

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```

|   | +--rw message-digest-encryption-type  ipi-ospf-types:ospf_cipher_type_t
|   | +--rw message-digest-key              ipi-ospf-types:ospf_md5_password_t
|   +--ro state
|       +--ro message-digest-id?            uint8
|       +--ro message-digest-encryption-type ipi-ospf-types:ospf_cipher_type_t
|       +--ro message-digest-key            ipi-ospf-types:ospf_md5_password_t
+--rw database-filter
| +--rw lsa
|   +--rw config
|   | +--rw filter-out?  empty
|   +--ro state
|       +--ro filter-out?  empty
+--rw timers
| +--rw config
| | +--rw dead-interval?      uint16
| | +--rw hello-interval?    uint16
| | +--rw retransmission-interval? uint16
| | +--rw transmit-delay?    uint16
| | +--rw resync-timeout?    uint16
| +--ro state
|   +--ro dead-interval?      uint16
|   +--ro hello-interval?    uint16
|   +--ro retransmission-interval? uint16
|   +--ro transmit-delay?    uint16
|   +--ro resync-timeout?    uint16
+--rw addresses
  +--rw address* [interface-address]
    +--rw interface-address -> ../config/interface-address
    +--rw config
    | +--rw interface-address?  inet:ipv4-address
    | +--rw cost?              uint16
    | +--rw priority?          uint8
    | +--rw mtu-ignore?        empty
    +--ro state
    | +--ro interface-address?  inet:ipv4-address
    | +--ro cost?              uint16

```

---

---

```

| +--ro priority?          uint8
| +--ro mtu-ignore?        empty
| +--ro designated-router
| | +--ro state
| |   +--ro router-id?    inet:ipv4-address
| |   +--ro address?      inet:ipv4-address
| +--ro backup-designated-router
| | +--ro state
| |   +--ro router-id?    inet:ipv4-address
| |   +--ro address?      inet:ipv4-address
| +--ro timers
|   +--ro state
|     +--ro runtime-dead-interval? uint32
+--rw authentication
| +--rw config
| | +--rw authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | +--rw key?                 ipi-ospf-types:ospf_md5_password_t
| +--ro state
| | +--ro authentication-type? ipi-ospf-types:ospf_if_authentication_type_t
| | +--ro key?                 ipi-ospf-types:ospf_md5_password_t
| +--rw message-digests
|   +--rw message-digest* [message-digest-id]
|     +--rw message-digest-id -> ../config/message-digest-id
|     +--rw config
|       | +--rw message-digest-id?          uint8
|       | +--rw message-digest-encryption-type ipi-ospf-types:ospf_cipher_type_t
|       | +--rw message-digest-key          ipi-ospf-types:ospf_md5_password_t
|       +--ro state
|         +--ro message-digest-id?          uint8
|         +--ro message-digest-encryption-type ipi-ospf-types:ospf_cipher_type_t
|         +--ro message-digest-key          ipi-ospf-types:ospf_md5_password_t
+--rw timers
| +--rw config
| | +--rw dead-interval?          uint16
| | +--rw hello-interval?        uint16
| | +--rw retransmission-interval? uint16

```

---

```

| | +--rw transmit-delay?      uint16
| | +--rw resync-timeout?      uint16
| +--ro state
|   +--ro dead-interval?      uint16
|   +--ro hello-interval?     uint16
|   +--ro retransmission-interval? uint16
|   +--ro transmit-delay?     uint16
|   +--ro resync-timeout?     uint16
+--rw database-filter
  +--rw lsa
    +--rw config
      | +--rw filter-out? empty
    +--ro state
      +--ro filter-out? empty

```

rpcs:

```

+---x ospfv2-terminal-debug-ospf-all-on {feature-list:HAVE_OSPFD}?
+---x ospfv2-terminal-debug-ospf-all-off {feature-list:HAVE_OSPFD}?
+---x ospfv2-terminal-debug-bfd-on {feature-list:HAVE_BFD}?
+---x ospfv2-terminal-debug-bfd-off {feature-list:HAVE_BFD}?
+---x ospfv2-terminal-debug-rate-limit-on {feature-list:HAVE_OSPFD}?
+---x ospfv2-terminal-debug-rate-limit-off {feature-list:HAVE_OSPFD}?
+---x ospfv2-terminal-debug-route-on {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w route ipi-ospf-types:ospf_debug_route_t
+---x ospfv2-terminal-debug-route-off {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w route ipi-ospf-types:ospf_debug_route_t
+---x ospfv2-terminal-debug-rib-on {feature-list:HAVE_RIBD}?
| +---w input
|   +---w rib ipi-ospf-types:ospf_debug_rib_t
+---x ospfv2-terminal-debug-rib-off {feature-list:HAVE_RIBD}?
| +---w input
|   +---w rib ipi-ospf-types:ospf_debug_rib_t
+---x ospfv2-terminal-debug-packet-all-on {feature-list:HAVE_OSPFD}?
| +---w input

```

---

```
| +---w all ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-all-off {feature-list:HAVE OSPFD}?
| +---w input
| +---w all ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-hello-on {feature-list:HAVE OSPFD}?
| +---w input
| +---w hello ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-hello-off {feature-list:HAVE OSPFD}?
| +---w input
| +---w hello ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-dd-on {feature-list:HAVE OSPFD}?
| +---w input
| +---w dd ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-dd-off {feature-list:HAVE OSPFD}?
| +---w input
| +---w dd ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-ls-request-on {feature-list:HAVE OSPFD}?
| +---w input
| +---w ls-request ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-ls-request-off {feature-list:HAVE OSPFD}?
| +---w input
| +---w ls-request ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-ls-update-on {feature-list:HAVE OSPFD}?
| +---w input
| +---w ls-update ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-ls-update-off {feature-list:HAVE OSPFD}?
| +---w input
| +---w ls-update ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-ls-ack-on {feature-list:HAVE OSPFD}?
| +---w input
| +---w ls-ack ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-packet-ls-ack-off {feature-list:HAVE OSPFD}?
| +---w input
| +---w ls-ack ipi-ospf-types:ospf_debug_packet_options_t
+---x ospfv2-terminal-debug-nsm-on {feature-list:HAVE OSPFD}?
| +---w input
```

---

[illegible]

```

+---x ospfv2-terminal-debug-redistribute-on {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w redistribute   ipi-ospf-types:ospf_debug_redist_t
+---x ospfv2-terminal-debug-redistribute-off {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w redistribute   ipi-ospf-types:ospf_debug_redist_t
+---x ospfv2-terminal-debug-graceful-restart-on {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w graceful-restart   ipi-ospf-types:ospf_debug_graceful_t
+---x ospfv2-terminal-debug-graceful-restart-off {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w graceful-restart   ipi-ospf-types:ospf_debug_graceful_t
+---x ospfv2-clear-process {feature-list:HAVE_OSPFD}?
| +---w input
|   +---w process-id   uint16
+---x ospfv2-clear-process-all {feature-list:HAVE_OSPFD}?
+---x ospfv2-restart-graceful {feature-list:HAVE_RESTART}?
| +---w input
|   +---w grace-period   uint16
+---x ospfv2-snmp-restart {feature-list:HAVE_SNMP}?

```

notifications:

```

+---n ospfv2-neighbor-state-change
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro address?           inet:ipv4-address
| +--ro ospf-id?           uint16
| +--ro router-id?         inet:ipv4-address
| +--ro neighbor-address-less-index?  uint32
| +--ro neighbor-router-id?   inet:ipv4-address
| +--ro neighbor-state?     ipi-ospf-types:ospf_neighbor_state_change_t
+---n ospfv2-tx-retransmit
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro address?           inet:ipv4-address
| +--ro ospf-id?           uint16

```

---

```

| +--ro router-id?          inet:ipv4-address
| +--ro neighbor-address-less-index?  uint32
| +--ro neighbor-router-id?    inet:ipv4-address
| +--ro packet-type?          ipi-ospf-types:ospf_packet_type_t
| +--ro lsdb-type?            ipi-ospf-types:ospf_lsdb_type_t
| +--ro lsdb-ls-id?           inet:ipv4-address
| +--ro lsdb-router-id?       inet:ipv4-address
+---n ospfv2-originate-lsa
| +--ro severity?            cml-data-types:cml_notif_severity_t
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro ospf-id?             uint16
| +--ro router-id?           inet:ipv4-address
| +--ro lsdb-area-id?         inet:ipv4-address
| +--ro lsdb-type?            ipi-ospf-types:ospf_lsdb_type_t
| +--ro lsdb-id?             inet:ipv4-address
| +--ro lsdb-router-id?       inet:ipv4-address
+---n ospfv2-lsdb-overflow-external-lsa
| +--ro severity?            cml-data-types:cml_notif_severity_t
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro ospf-id?             uint16
| +--ro router-id?           inet:ipv4-address
| +--ro max-limit?           uint32
+---n ospfv2-virtual-link-interface-config-error
| +--ro severity?            cml-data-types:cml_notif_severity_t
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro remote-router-id?     inet:ipv4-address
| +--ro area-id?             ipi-ospf-types:ospf_area_t
| +--ro ospf-id?             uint16
| +--ro router-id?           inet:ipv4-address
| +--ro error-type?           ipi-ospf-types:ospf_config_error_type_t
| +--ro packet-type?          ipi-ospf-types:ospf_packet_type_t
+---n ospfv2-virtual-link-interface-state-change
| +--ro severity?            cml-data-types:cml_notif_severity_t
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro remote-router-id?     inet:ipv4-address
| +--ro area-id?             ipi-ospf-types:ospf_area_t

```

---

---

```
| +--ro ospf-id?          uint16
| +--ro router-id?       inet:ipv4-address
| +--ro interface-state? ipi-ospf-types:ospf_interface_state_t
+---n ospfv2-virtual-neighbor-state-change
| +--ro severity?        cml-data-types:cml_notif_severity_t
| +--ro eventClass?      cml-data-types:cml_notif_class_t
| +--ro remote-router-id? inet:ipv4-address
| +--ro area-id?         ipi-ospf-types:ospf_area_t
| +--ro ospf-id?         uint16
| +--ro router-id?       inet:ipv4-address
| +--ro neighbor-state?  ipi-ospf-types:ospf_neighbor_state_change_t
+---n ospfv2-virtual-link-interface-rx-bad-packet
| +--ro severity?        cml-data-types:cml_notif_severity_t
| +--ro eventClass?      cml-data-types:cml_notif_class_t
| +--ro remote-router-id? inet:ipv4-address
| +--ro area-id?         ipi-ospf-types:ospf_area_t
| +--ro ospf-id?         uint16
| +--ro router-id?       inet:ipv4-address
| +--ro packet-type?     ipi-ospf-types:ospf_packet_type_t
+---n ospfv2-virtual-link-interface-tx-retransmit
| +--ro severity?        cml-data-types:cml_notif_severity_t
| +--ro eventClass?      cml-data-types:cml_notif_class_t
| +--ro remote-router-id? inet:ipv4-address
| +--ro area-id?         ipi-ospf-types:ospf_area_t
| +--ro ospf-id?         uint16
| +--ro router-id?       inet:ipv4-address
| +--ro packet-type?     ipi-ospf-types:ospf_packet_type_t
| +--ro lsdb-type?       ipi-ospf-types:ospf_lsdb_type_t
| +--ro lsdb-lsid?       inet:ipv4-address
| +--ro lsdb-router-id?  inet:ipv4-address
+---n ospfv2-interface-link-state-change
| +--ro severity?        cml-data-types:cml_notif_severity_t
| +--ro eventClass?      cml-data-types:cml_notif_class_t
| +--ro name?            string
| +--ro router-id?       inet:ipv4-address
| +--ro interface-address? inet:ipv4-address
```

---



---

```
| +--ro address-less-interface? uint32
| +--ro interface-state?      ipi-ospf-types:ospf_interface_state_t
+---n ospfv2-interface-rx-bad-packet
| +--ro severity?            cml-data-types:cml_notif_severity_t
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro name?                string
| +--ro router-id?           inet:ipv4-address
| +--ro interface-address?    inet:ipv4-address
| +--ro address-less-interface? uint32
| +--ro packet-src?          inet:ipv4-address
| +--ro packet-type?          ipi-ospf-types:ospf_packet_type_t
+---n ospfv2-interface-config-error
  +--ro severity?            cml-data-types:cml_notif_severity_t
  +--ro eventClass?          cml-data-types:cml_notif_class_t
  +--ro name?                string
  +--ro router-id?           inet:ipv4-address
  +--ro interface-address?    inet:ipv4-address
  +--ro address-less-interface? uint32
  +--ro error-type?          ipi-ospf-types:ospf_config_error_type_t
  +--ro packet-type?          ipi-ospf-types:ospf_packet_type_t
```

---

## module: ipi-ospfv3

```
+--rw ospfv3
  +--rw global
```

---

```

| +--rw config
| | +--rw display-route-on-single-line? empty
| | +--ro state
| | | +--ro display-route-on-single-line? empty
| | +--rw graceful-restart {feature-list:HAVE_RESTART}?
| |   +--rw config
| | |   +--rw grace-period?          uint16
| | |   +--rw controlled-restarts-only? empty
| | |   +--ro state
| | | |   +--ro grace-period?          uint16
| | | |   +--ro controlled-restarts-only? empty
| | +--rw helper
| |   +--rw config
| | |   +--rw max-grace-period?      uint16
| | |   +--rw disable-all-neighbors? empty
| | |   +--rw disable-neighbor*      inet:ipv4-address
| |   +--ro state
| | |   +--ro max-grace-period?      uint16
| | |   +--ro disable-all-neighbors? empty
| | |   +--ro disable-neighbor*      inet:ipv4-address
+--rw processes
| +--rw process* [ospfv3-id]
| | +--rw ospfv3-id          -> ../config/ospfv3-id
| | +--rw config
| | | +--rw ospfv3-id?          ipi-ospfv3-types:ospfv3_string_t
| | | +--rw vrf-name            -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| | | | +--rw router-id?          inet:ipv4-address
| | | | +--rw bfd-enable-all-interfaces? empty {feature-list:HAVE_BFD}?
| | | | +--rw database-summary?    empty
| | | | +--rw area-border-type?    ipi-ospfv3-types:ospfv3_abr_type_t
| | | | +--rw default-metric?      uint32
| | | | +--rw shutdown?            empty
| | | | +--rw log-adjacency-changes? ipi-ospfv3-types:ospfv3_log_adj_opt_t
| | | | +--rw reference-bandwidth? uint32
| | | | +--rw max-database-descriptors? uint16
| | |   +--ro state

```

---

```

| | +--ro statistics
| | | +--ro up-time?          string
| | | +--ro database-description-in?  yang:counter64
| | | +--ro database-description-out? yang:counter64
| | | +--ro external-lsa-count?      yang:counter64
| | | +--ro external-lsa-checksum?   string
| | | +--ro unknown-lsa-count?      yang:counter64
| | | +--ro lsa-out?                yang:counter64
| | | +--ro lsa-in?                 yang:counter64
| | | +--ro area-count?             yang:counter64
| | +--ro ospfv3-id?              ipi-ospfv3-types:ospfv3_string_t
| | +--ro vrf-name                 -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
| | | +--ro router-id?              inet:ipv4-address
| | | +--ro bfd-enable-all-interfaces?  empty {feature-list:HAVE_BFD}?
| | | +--ro database-summary?          empty
| | | +--ro area-border-type?          ipi-ospfv3-types:ospfv3_abr_type_t
| | | +--ro default-metric?            uint32
| | | +--ro shutdown?                  empty
| | | +--ro log-adjacency-changes?     ipi-ospfv3-types:ospfv3_log_adj_opt_t
| | | +--ro reference-bandwidth?       uint32
| | | +--ro max-database-descriptors?  uint16
| | +--ro link-state-database
| | | +--ro link* [link-index]
| | | | +--ro link-index -> ../state/link-index
| | | | +--ro lsa-prefix* [prefix]
| | | | | +--ro prefix -> ../state/prefix
| | | | | +--ro state
| | | | | | +--ro prefix?          cml-data-types:cml_ipv6_prefix_t
| | | | | | +--ro no-unicast-bit?  empty
| | | | | | +--ro prefix-options?  ipi-ospfv3-types:ospfv3_prefix_options_t
| | | | +--ro state
| | | | | +--ro link-index?        uint32
| | | | | +--ro link-local-address? inet:ipv6-address
| | | | | +--ro priority?          uint8
| | | | | +--ro interface-name?    string
| | | | | +--ro prefix-count?      uint32

```

---

```

| | | +--ro advertising-router? inet:ipv4-address
| | | +--ro ls-age?             uint16
| | | +--ro ls-type?           ipi-ospfv3-types:ospfv3_ls_type_t
| | | +--ro ls-id?            string
| | | +--ro ls-sequence-number? string
| | | +--ro ls-checksum?       string
| | | +--ro ls-length?         uint16
| | | +--ro ls-options?       ipi-ospfv3-types:ospfv3_ls_options_t
| | +--ro router* [router-index]
| | | +--ro router-index -> ../state/router-index
| | | +--ro link* [link-index]
| | | | +--ro link-index -> ../state/link-index
| | | | +--ro state
| | | | | +--ro link-index?         uint32
| | | | | +--ro neighbor-router-id? inet:ipv4-address
| | | | | +--ro neighbor-interface-id? uint32
| | | | | +--ro interface-id?       uint32
| | | | | +--ro metric?             uint16
| | | | | +--ro metric-type?       ipi-ospfv3-types:ospfv3_link_metric_type_t
| | | +--ro state
| | | | +--ro router-index?         uint32
| | | | +--ro area-id?             inet:ipv4-address
| | | | +--ro ls-router-properties? ipi-ospfv3-types:ospfv3_router_properties_t
| | | | +--ro advertising-router?  inet:ipv4-address
| | | | +--ro ls-age?             uint16
| | | | +--ro ls-type?           ipi-ospfv3-types:ospfv3_ls_type_t
| | | | +--ro ls-id?            string
| | | | +--ro ls-sequence-number? string
| | | | +--ro ls-checksum?       string
| | | | +--ro ls-length?         uint16
| | | | +--ro ls-options?       ipi-ospfv3-types:ospfv3_ls_options_t
| | +--ro network* [advertising-router]
| | | +--ro advertising-router -> ../state/advertising-router
| | | +--ro state
| | | | +--ro advertising-router? inet:ipv4-address
| | | | +--ro ls-age?             uint16

```

---

---

```

| | | +--ro ls-type?          ipi-ospfv3-types:ospfv3_ls_type_t
| | | +--ro ls-id?           string
| | | +--ro ls-sequence-number? string
| | | +--ro ls-checksum?      string
| | | +--ro ls-length?        uint16
| | | +--ro ls-options?       ipi-ospfv3-types:ospfv3_ls_options_t
| | | +--ro attached-router*   inet:ipv4-address
| | +--ro intra-prefix* [intra-prefix-index]
| | | +--ro intra-prefix-index -> ../state/intra-prefix-index
| | | +--ro lsa-prefix* [prefix]
| | | | +--ro prefix -> ../state/prefix
| | | | +--ro state
| | | | | +--ro prefix?       cml-data-types:cml_ipv6_prefix_t
| | | | | +--ro no-unicast-bit? empty
| | | | | +--ro prefix-options? ipi-ospfv3-types:ospfv3_prefix_options_t
| | | | | +--ro metric?       uint16
| | | | +--ro state
| | | | | +--ro intra-prefix-index?      uint32
| | | | | +--ro area-id?                  inet:ipv4-address
| | | | | +--ro referenced-ls-advertising-router? inet:ipv4-address
| | | | | +--ro referenced-ls-id?          string
| | | | | +--ro referenced-ls-type?         string
| | | | | +--ro prefix-count?              uint32
| | | | | +--ro advertising-router?        inet:ipv4-address
| | | | | +--ro ls-age?                     uint16
| | | | | +--ro ls-type?                    ipi-ospfv3-types:ospfv3_ls_type_t
| | | | | +--ro ls-id?                      string
| | | | | +--ro ls-sequence-number?         string
| | | | | +--ro ls-checksum?                string
| | | | | +--ro ls-length?                  uint16
| | | +--ro inter-prefix* [inter-prefix-index]
| | | | +--ro inter-prefix-index -> ../state/inter-prefix-index
| | | | +--ro lsa-prefix* [prefix]
| | | | | +--ro prefix -> ../state/prefix
| | | | | +--ro state
| | | | | | +--ro prefix?       cml-data-types:cml_ipv6_prefix_t

```

---

```
| | | +--ro no-unicast-bit? empty
| | | +--ro prefix-options? ipi-ospfv3-types:ospfv3_prefix_options_t
| | | +--ro metric? uint16
| | +--ro state
| | | +--ro inter-prefix-index? uint32
| | | +--ro area-id? inet:ipv4-address
| | | +--ro advertising-router? inet:ipv4-address
| | | +--ro ls-age? uint16
| | | +--ro ls-type? ipi-ospfv3-types:ospfv3_ls_type_t
| | | +--ro ls-id? string
| | | +--ro ls-sequence-number? string
| | | +--ro ls-checksum? string
| | | +--ro ls-length? uint16
| | +--ro inter-router* [inter-router-index]
| | | +--ro inter-router-index -> ../state/inter-router-index
| | +--ro state
| | | +--ro inter-router-index? uint32
| | | +--ro area-id? inet:ipv4-address
| | | +--ro router-id? inet:ipv4-address
| | | +--ro advertising-router? inet:ipv4-address
| | | +--ro ls-age? uint16
| | | +--ro ls-type? ipi-ospfv3-types:ospfv3_ls_type_t
| | | +--ro ls-id? string
| | | +--ro ls-sequence-number? string
| | | +--ro ls-checksum? string
| | | +--ro ls-length? uint16
| | | +--ro metric? uint16
| | | +--ro ls-options? ipi-ospfv3-types:ospfv3_ls_options_t
| | +--ro external* [external-index]
| | | +--ro external-index -> ../state/external-index
| | | +--ro lsa-prefix* [prefix]
| | | | +--ro prefix -> ../state/prefix
| | | | +--ro state
| | | | | +--ro prefix? cml-data-types:cml_ipv6_prefix_t
| | | | | +--ro no-unicast-bit? empty
| | | | | +--ro prefix-options? ipi-ospfv3-types:ospfv3_prefix_options_t
```

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```

| | | +--ro state
| | |   +--ro external-index?    uint32
| | |   +--ro referenced-ls-id?  string
| | |   +--ro referenced-ls-type? uint32
| | |   +--ro route-tag?         uint32
| | |   +--ro forwarding-address? inet:ip-address
| | |   +--ro metric?            uint16
| | |   +--ro metric-type?       ipi-ospfv3-types:ospfv3_ls_metric_type_t
| | |   +--ro advertising-router? inet:ipv4-address
| | |   +--ro ls-age?            uint16
| | |   +--ro ls-type?           ipi-ospfv3-types:ospfv3_ls_type_t
| | |   +--ro ls-id?             string
| | |   +--ro ls-sequence-number? string
| | |   +--ro ls-checksum?       string
| | |   +--ro ls-length?        uint16
| | +--ro not-so-stubby-area* [nssa-index]
| |   +--ro nssa-index -> ../state/nssa-index
| |   +--ro lsa-prefix* [prefix]
| |     +--ro prefix -> ../state/prefix
| |     +--ro state
| |       +--ro prefix?          cml-data-types:cml_ipv6_prefix_t
| |       +--ro no-unicast-bit?  empty
| |       +--ro prefix-options?  ipi-ospfv3-types:ospfv3_prefix_options_t
| |   +--ro state
| |     +--ro nssa-index?        uint32
| |     +--ro referenced-ls-id?  string
| |     +--ro referenced-ls-type? uint32
| |     +--ro route-tag?        uint32
| |     +--ro forwarding-address? inet:ip-address
| |     +--ro metric?           uint16
| |     +--ro metric-type?       ipi-ospfv3-types:ospfv3_ls_metric_type_t
| |     +--ro advertising-router? inet:ipv4-address
| |     +--ro ls-age?           uint16
| |     +--ro ls-type?          ipi-ospfv3-types:ospfv3_ls_type_t
| |     +--ro ls-id?            string
| |     +--ro ls-sequence-number? string

```

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```

| |   +--ro ls-checksum?      string
| |   +--ro ls-length?       uint16
| +--ro route* [prefix]
| | +--ro prefix      -> ../state/prefix
| | +--ro next-hop* [address]
| | | +--ro address   -> ../state/address
| | | +--ro state
| | |   +--ro address?      inet:ip-address
| | |   +--ro interface-name? string
| | |   +--ro transit-area? empty
| | |   +--ro area-id?      inet:ipv4-address
| | |   +--ro connected?    empty
| | |   +--ro invalid?      empty
| | |   +--ro code?         string
| | +--ro state
| | | +--ro prefix?    cml-data-types:cml_ip_prefix_t
| | | +--ro distance?  uint8
| | +--ro route-path
| |   +--ro state
| |     +--ro type?      ipi-ospfv3-types:ospfv3_path_type_t
| |     +--ro code?      string
| |     +--ro discard-connection? empty
| |     +--ro cost?      uint32
| |     +--ro type-2-cost? uint32
| |     +--ro path-flags? ipi-ospfv3-types:ospfv3_path_flags_t
| +--rw administrative-distance
| | +--rw config
| | | +--rw default-distance? uint8
| | +--ro state
| | | +--ro default-distance? uint8
| | +--rw ospf
| |   +--rw config
| | |   +--rw intra-area-distance? uint8
| | |   +--rw inter-area-distance? uint8
| | |   +--rw external-routes-distance? uint8
| |   +--ro state

```

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```

| |   +--ro intra-area-distance?   uint8
| |   +--ro inter-area-distance?   uint8
| |   +--ro external-routes-distance? uint8
| +--rw capability
| | +--rw config
| | | +--rw disable-graceful-restart? empty {feature-list:HAVE_RESTART}?
| | | +--ro state
| |   +--ro disable-graceful-restart? empty {feature-list:HAVE_RESTART}?
| +--rw timers
| | +--rw spf
| |   +--rw config!
| | | +--rw exponential-min-delay  uint32
| | | +--rw exponential-max-delay  uint32
| |   +--ro state
| |     +--ro exponential-min-delay  uint32
| |     +--ro exponential-max-delay  uint32
| +--rw passive-interfaces
| | +--rw config
| | | +--rw all-interfaces? empty
| | | +--ro state
| | | +--ro all-interfaces? empty
| | +--rw passive-interface* [name]
| |   +--rw name    -> ../config/name
| |   +--rw config
| | | +--rw name?      string
| | | +--rw passive-mode ipi-ospfv3-types:ospfv3_passive_mode_t
| | | +--ro state
| | |   +--ro name?      string
| | |   +--ro passive-mode ipi-ospfv3-types:ospfv3_passive_mode_t
| +--rw summary-addresses
| | +--rw summary-address* [address]
| |   +--rw address  -> ../config/address
| |   +--rw config
| | | +--rw address?    cml-data-types:cml_ipv6_prefix_t
| | | +--rw not-advertise? empty
| | | +--rw translate-tag? uint32

```

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```

| | | +--rw all-tag?      uint32
| |   +--ro state
| |     +--ro address?    cml-data-types:cml_ipv6_prefix_t
| |     +--ro not-advertise? empty
| |     +--ro translate-tag? uint32
| |     +--ro all-tag?    uint32
|   +--rw default-information
| | +--rw config
| | | +--rw originate?          empty
| | | +--rw always-advertise-default-route? empty
| | | +--rw metric?            uint32
| | | +--rw metric-type?       ipi-ospfv3-types:ospfv3_metric_type_t
| | | +--rw route-map?        string
| | +--ro state
| |   +--ro originate?          empty
| |   +--ro always-advertise-default-route? empty
| |   +--ro metric?            uint32
| |   +--ro metric-type?       ipi-ospfv3-types:ospfv3_metric_type_t
| |   +--ro route-map?        string
| +--rw distribute-list {feature-list:HAVE_ACL}?
| | +--rw filter-in
| | | +--rw config
| | | | +--rw access-control-list? string
| | | | +--ro state
| | | | +--ro access-control-list? string
| | +--rw filter-out
| |   +--rw routing-protocols
| | | +--rw routing-protocol* [protocol]
| | |   +--rw protocol -> ../config/protocol
| | |   +--rw config
| | | | +--rw protocol?          ipi-ospfv3-types:ospfv3_route_source_type_t
| | | | +--rw access-control-list string
| | | | +--ro state
| | | |   +--ro protocol?        ipi-ospfv3-types:ospfv3_route_source_type_t
| | | |   +--ro access-control-list string
| | +--rw ospf-processes

```

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```

| |   +--rw ospf-process* [ospf-process-id]
| |     +--rw ospf-process-id  -> ../config/ospf-process-id
| |     +--rw config
| |       | +--rw ospf-process-id?    ipi-ospfv3-types:ospfv3_string_t
| |       | +--rw access-control-list  string
| |       +--ro state
| |         +--ro ospf-process-id?    ipi-ospfv3-types:ospfv3_string_t
| |         +--ro access-control-list  string
| +--rw redistribute
| | +--rw routing-protocols
| | | +--rw routing-protocol* [protocol]
| | | | +--rw protocol  -> ../config/protocol
| | | | +--rw config
| | | | | +--rw metric?    uint32
| | | | | +--rw metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| | | | | +--rw route-map?  string
| | | | | +--rw route-tag?  uint32
| | | | | +--rw protocol?   ipi-ospfv3-types:ospfv3_route_source_type_t
| | | | +--ro state
| | | |   +--ro metric?    uint32
| | | |   +--ro metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| | | |   +--ro route-map?  string
| | | |   +--ro route-tag?  uint32
| | | |   +--ro protocol?   ipi-ospfv3-types:ospfv3_route_source_type_t
| | +--rw ospf-processes
| |   +--rw ospf-process* [ospf-process-id]
| |     +--rw ospf-process-id  -> ../config/ospf-process-id
| |     +--rw config
| |       | +--rw metric?    uint32
| |       | +--rw metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| |       | +--rw route-map?  string
| |       | +--rw route-tag?  uint32
| |       | +--rw ospf-process-id? ipi-ospfv3-types:ospfv3_string_t
| |       +--ro state
| |         +--ro metric?    uint32
| |         +--ro metric-type? ipi-ospfv3-types:ospfv3_metric_type_t

```

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```

| |      +--ro route-map?      string
| |      +--ro route-tag?      uint32
| |      +--ro ospf-process-id? ipi-ospfv3-types:ospfv3_string_t
| +--rw areas
| | +--rw area* [area-id]
| |   +--rw area-id      -> ../config/area-id
| |   +--rw config
| |     | +--rw area-id?      ipi-ospfv3-types:ospfv3_area_t
| |     | +--rw default-cost? uint32
| |     +--ro state
| |       | +--ro area-id?      ipi-ospfv3-types:ospfv3_area_t
| |       | +--ro default-cost? uint32
| |       +--rw stub
| |         | +--rw config!
| |         | | +--rw enable      empty
| |         | | +--rw no-summary? empty
| |         | +--ro state
| |         |   +--ro enable      empty
| |         |   +--ro no-summary? empty
| |         +--rw nssa {feature-list:HAVE_NSSA}?
| |           | +--rw config!
| |           | | +--rw enable      empty
| |           | | +--rw no-summary? empty
| |           | | +--rw stability-interval? uint32
| |           | | +--rw translator-role? ipi-ospfv3-types:ospfv3_translator_role_t
| |           | | +--rw no-redistribution? empty
| |           | | +--rw default-information-originate? empty
| |           | | +--rw metric?      uint32
| |           | | +--rw metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| |           | | +--rw route-map?    string
| |           +--ro state
| |             +--ro enable      empty
| |             +--ro no-summary? empty
| |             +--ro stability-interval? uint32
| |             +--ro translator-role? ipi-ospfv3-types:ospfv3_translator_role_t
| |             +--ro no-redistribution? empty

```

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```

| | | +--ro default-information-originate? empty
| | | +--ro metric? uint32
| | | +--ro metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| | | +--ro route-map? string
| | +--rw virtual-links
| | | +--rw virtual-link* [remote-router-id]
| | | +--rw remote-router-id -> ../config/remote-router-id
| | | +--rw config
| | | | +--rw remote-router-id? inet:ipv4-address
| | | | +--rw bfd-fall-over? empty {feature-list:HAVE_BFD}?
| | | | +--rw instance-id? uint8
| | | | +--rw authentication-cryptomap? -> /ipi-ipsec:ipsec/crypto-maps/crypto-map/config/name {feature-
list:HAVE_IPSEC,feature-list:HAVE_TUNNEL}?
| | | +--ro state
| | | | +--ro remote-router-id? inet:ipv4-address
| | | | +--ro bfd-fall-over? empty {feature-list:HAVE_BFD}?
| | | | +--ro instance-id? uint8
| | | | +--ro authentication-cryptomap? -> /ipi-ipsec:ipsec/crypto-maps/crypto-map/config/name
{feature-list:HAVE_IPSEC,feature-list:HAVE_TUNNEL}?
| | | | +--ro name? string
| | | | +--ro status? ipi-ospfv3-types:ospfv3_link_status_t
| | | | +--ro interface-name? string
| | | | +--ro virtual-link-interface-state? string
| | | | +--ro local-address? inet:ipv4-address
| | | | +--ro remote-address? inet:ipv4-address
| | | | +--ro virtual-link-instance-id? uint32
| | | | +--ro hello-suppression-enable? empty
| | | | +--ro do-not-age-lsa-enable? empty
| | | | +--ro hello-due-in? yang:date-and-time
| | | | +--ro adjacency-state? string
| | | | +--ro virtual-link-config-error
| | | | | +--ro router-id? inet:ipv4-address
| | | | | +--ro instance-id? uint8
| | | | | +--ro error-type? ipi-ospfv3-types:ospfv3_config_error_type_t
| | | | | +--ro packet-type? ipi-ospfv3-types:ospfv3_packet_type_t
| | | | +--ro virtual-link-state-change
| | | | | +--ro router-id? inet:ipv4-address

```

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```

| | | | +--ro instance-id?      uint8
| | | | +--ro virtual-link-state? ipi-ospfv3-types:ospfv3_interface_state_t
| | | | +--ro virtual-link-neighbor-state-change
| | | | +--ro router-id?      inet:ipv4-address
| | | | +--ro instance-id?      uint8
| | | | +--ro neighbor-state? ipi-ospfv3-types:ospfv3_interface_state_t
| | | | +--ro virtual-link-tx-retransmit
| | | | +--ro router-id?      inet:ipv4-address
| | | | +--ro instance-id?      uint8
| | | | +--ro packet-type?      ipi-ospfv3-types:ospfv3_packet_type_t
| | | | +--ro lsdb-type?        uint32
| | | | +--ro lsdb-lsid?        uint32
| | | | +--ro lsdb-router-id?   inet:ipv4-address
| | | | +--ro virtual-link-rx-bad-packet
| | | |   +--ro router-id?      inet:ipv4-address
| | | |   +--ro instance-id?    uint8
| | | |   +--ro packet-type?    ipi-ospfv3-types:ospfv3_packet_type_t
| | | +--rw timers
| | |   +--rw config
| | |     +--rw dead-interval?      uint16
| | |     +--rw hello-interval?     uint16
| | |     +--rw transmission-delay?  uint16
| | |     +--rw retransmission-interval? uint16
| | |   +--ro state
| | |     +--ro dead-interval?      uint16
| | |     +--ro hello-interval?     uint16
| | |     +--ro transmission-delay?  uint16
| | |     +--ro retransmission-interval? uint16
| | +--rw address-ranges
| |   +--rw address-range* [address]
| |     +--rw address -> ../config/address
| |     +--rw config
| |       +--rw address?      cml-data-types:cml_ipv6_prefix_t
| |       +--rw not-advertise? empty
| |       +--ro state
| |       +--ro address?      cml-data-types:cml_ipv6_prefix_t

```

---

```

| |      +--ro not-advertise?  empty
| +--ro area-info* [area-id]
| | +--ro area-id  -> ../state/area-id
| | +--ro state
| | | +--ro statistics
| | | | +--ro active-interface-count?  yang:counter64
| | | | +--ro interface-count?        yang:counter64
| | | | +--ro spf-algorithm-executed-count?  yang:counter64
| | | | +--ro lsa-count?               yang:counter64
| | | | +--ro lsa-checksum?           string
| | | | +--ro unknown-lsa-count?      yang:counter64
| | | +--ro area-id?      inet:ipv4-address
| | | +--ro interface-name* string
| | | +--ro backbone?     empty
| | | +--ro active?       empty
| | | +--ro asbr?         empty
| | +--ro vertex* [router-id]
| |   +--ro router-id  -> ../state/router-id
| |   +--ro next-hop* [address]
| | | +--ro address  -> ../state/address
| | | +--ro state
| | | | +--ro address?      inet:ip-address
| | | | +--ro interface-name? string
| | | | +--ro transit-area?  empty
| | | | +--ro area-id?      inet:ipv4-address
| | | | +--ro connected?    empty
| | | | +--ro invalid?      empty
| | | | +--ro code?         string
| | | +--ro state
| |   +--ro router-id?  inet:ipv4-address
| |   +--ro distance?   uint8
| +--rw address-family
| | +--rw ipv4
| |   +--rw config
| | | +--rw enable-af?  empty
| | +--ro state

```

---

```

| | | +--ro enable-af? empty
| | +--rw areas
| | | +--rw area* [area-id]
| | |   +--rw area-id      -> ../config/area-id
| | |   +--rw config
| | |     | +--rw area-id? ipi-ospfv3-types:ospfv3_area_t
| | |     +--ro state
| | |     | +--ro area-id? ipi-ospfv3-types:ospfv3_area_t
| | |     +--rw address-ranges
| | |       +--rw address-range* [address]
| | |       +--rw address  -> ../config/address
| | |       +--rw config
| | |         | +--rw address?    cml-data-types:cml_ipv4_addr_prefix_t
| | |         | +--rw not-advertise? empty
| | |         +--ro state
| | |           +--ro address?    cml-data-types:cml_ipv4_addr_prefix_t
| | |           +--ro not-advertise? empty
| | +--rw summary-addresses
| | | +--rw summary-address* [address]
| | |   +--rw address  -> ../config/address
| | |   +--rw config
| | |     | +--rw address?    cml-data-types:cml_ipv4_prefix_t
| | |     | +--rw not-advertise? empty
| | |     | +--rw tag?        uint32
| | |     +--ro state
| | |       +--ro address?    cml-data-types:cml_ipv4_prefix_t
| | |       +--ro not-advertise? empty
| | |       +--ro tag?        uint32
| | +--rw default-information
| | | +--rw config
| | |   | +--rw originate?          empty
| | |   | +--rw always-advertise-default-route? empty
| | |   | +--rw metric?            uint32
| | |   | +--rw metric-type?       ipi-ospfv3-types:ospfv3_metric_type_t
| | |   | +--rw route-map?         string
| | |   +--ro state

```

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---

```

| | | +--ro originate?          empty
| | | +--ro always-advertise-default-route? empty
| | | +--ro metric?             uint32
| | | +--ro metric-type?        ipi-ospfv3-types:ospfv3_metric_type_t
| | | +--ro route-map?          string
| | +--rw redistribute
| |   +--rw routing-protocols
| |     | +--rw routing-protocol* [protocol-af]
| |     |   +--rw protocol-af -> ../config/protocol-af
| |     |   +--rw config
| |     |     | +--rw protocol-af? ipi-ospfv3-types:ospfv3_af_route_source_type_t
| |     |     | +--rw metric?      uint32
| |     |     | +--rw metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| |     |     | +--rw route-map?   string
| |     |     | +--rw route-tag?   uint32
| |     |     +--ro state
| |     |       +--ro protocol-af? ipi-ospfv3-types:ospfv3_af_route_source_type_t
| |     |       +--ro metric?      uint32
| |     |       +--ro metric-type? ipi-ospfv3-types:ospfv3_metric_type_t
| |     |       +--ro route-map?   string
| |     |       +--ro route-tag?   uint32
| |   +--rw ospf-processes
| |     +--rw ospf-process* [ospfv2-process-id]
| |       +--rw ospfv2-process-id -> ../config/ospfv2-process-id
| |       +--rw config
| |         | +--rw ospfv2-process-id? uint16
| |         | +--rw metric?            uint32
| |         | +--rw metric-type?       ipi-ospfv3-types:ospfv3_metric_type_t
| |         | +--rw route-map?         string
| |         | +--rw route-tag?         uint32
| |       +--ro state
| |         +--ro ospfv2-process-id? uint16
| |         +--ro metric?            uint32
| |         +--ro metric-type?       ipi-ospfv3-types:ospfv3_metric_type_t
| |         +--ro route-map?         string
| |         +--ro route-tag?         uint32

```

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```

|   +--ro originate-lsa
|   |   +--ro router-id?      -> /ospfv3/processes/process/state/router-id
|   |   +--ro lsdb-area-id?   inet:ipv4-address
|   |   +--ro lsdb-type?      uint32
|   |   +--ro lsdb-id?        uint32
|   |   +--ro lsdb-router-id? inet:ipv4-address
|   +--ro tx-retransmit
|   |   +--ro router-id?      inet:ipv4-address
|   |   +--ro if-index?       int32
|   |   +--ro instance-id?    uint8
|   |   +--ro neighbor-router-id? inet:ipv4-address
|   |   +--ro packet-type?     ipi-ospfv3-types:ospfv3_packet_type_t
|   |   +--ro lsdb-type?      uint32
|   |   +--ro lsdb-lsid?      uint32
|   |   +--ro lsdb-router-id? inet:ipv4-address
|   +--ro neighbor-state-change
|   |   +--ro router-id?      inet:ipv4-address
|   |   +--ro if-index?       int32
|   |   +--ro instance-id?    uint8
|   |   +--ro neighbor-router-id? inet:ipv4-address
|   +--ro neighbor-state?     ipi-ospfv3-types:ospfv3_neighbor_state_change_t
+--rw debug
| +--rw config
| | +--rw bfd?          empty {feature-list:HAVE_BFD}?
| | +--rw retransmission? empty
| | +--rw events?       ipi-ospfv3-types:ospfv3_debug_event_t
| | +--rw ifsm?         ipi-ospfv3-types:ospfv3_debug_ifsm_t
| | +--rw lsa?          ipi-ospfv3-types:ospfv3_debug_lsa_t
| | +--rw nfsm?         ipi-ospfv3-types:ospfv3_debug_nfsm_t
| | +--rw nsm?          ipi-ospfv3-types:ospfv3_debug_nsm_t
| | +--rw rib?          ipi-ospfv3-types:ospfv3_debug_rib_t {feature-list:HAVE_RIBD}?
| | +--rw route?        ipi-ospfv3-types:ospfv3_debug_route_t
| | +--rw packet-hello?  ipi-ospfv3-types:ospfv3_debug_packet_options_t
| | +--rw packet-dd?     ipi-ospfv3-types:ospfv3_debug_packet_options_t
| | +--rw packet-ls-request? ipi-ospfv3-types:ospfv3_debug_packet_options_t
| | +--rw packet-ls-update? ipi-ospfv3-types:ospfv3_debug_packet_options_t

```

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```

| | +--rw packet-ls-ack?      ipi-ospfv3-types:ospfv3_debug_packet_options_t
| +--ro state
|   +--ro bfd?                empty {feature-list:HAVE_BFD}?
|   +--ro retransmission?     empty
|   +--ro events?             ipi-ospfv3-types:ospfv3_debug_event_t
|   +--ro ifsm?               ipi-ospfv3-types:ospfv3_debug_ifsm_t
|   +--ro lsa?                ipi-ospfv3-types:ospfv3_debug_lsa_t
|   +--ro nfsm?               ipi-ospfv3-types:ospfv3_debug_nfsm_t
|   +--ro nsm?                ipi-ospfv3-types:ospfv3_debug_nsm_t
|   +--ro rib?                ipi-ospfv3-types:ospfv3_debug_rib_t {feature-list:HAVE_RIBD}?
|   +--ro route?              ipi-ospfv3-types:ospfv3_debug_route_t
|   +--ro packet-hello?       ipi-ospfv3-types:ospfv3_debug_packet_options_t
|   +--ro packet-dd?          ipi-ospfv3-types:ospfv3_debug_packet_options_t
|   +--ro packet-ls-request?   ipi-ospfv3-types:ospfv3_debug_packet_options_t
|   +--ro packet-ls-update?    ipi-ospfv3-types:ospfv3_debug_packet_options_t
|   +--ro packet-ls-ack?       ipi-ospfv3-types:ospfv3_debug_packet_options_t
|   +--ro terminal-debug-status
|     +--ro bfd?              cml-data-types:cml_on_off_t {feature-list:HAVE_BFD}?
|     +--ro retransmission?    cml-data-types:cml_on_off_t
|     +--ro events?            ipi-ospfv3-types:ospfv3_debug_event_t
|     +--ro ifsm?              ipi-ospfv3-types:ospfv3_debug_ifsm_t
|     +--ro lsa?               ipi-ospfv3-types:ospfv3_debug_lsa_t
|     +--ro nfsm?              ipi-ospfv3-types:ospfv3_debug_nfsm_t
|     +--ro nsm?               ipi-ospfv3-types:ospfv3_debug_nsm_t
|     +--ro rib?               ipi-ospfv3-types:ospfv3_debug_rib_t {feature-list:HAVE_RIBD}?
|     +--ro route?             ipi-ospfv3-types:ospfv3_debug_route_t
|     +--ro packet-hello?      ipi-ospfv3-types:ospfv3_debug_packet_options_t
|     +--ro packet-dd?         ipi-ospfv3-types:ospfv3_debug_packet_options_t
|     +--ro packet-ls-request? ipi-ospfv3-types:ospfv3_debug_packet_options_t
|     +--ro packet-ls-update?  ipi-ospfv3-types:ospfv3_debug_packet_options_t
|     +--ro packet-ls-ack?     ipi-ospfv3-types:ospfv3_debug_packet_options_t
+--rw interfaces
  +--rw interface* [interface-name]
    +--rw interface-name -> ../config/interface-name
    +--rw config
      | +--rw interface-name? -> /ipi-interface:interfaces/interface/name

```

---

---

```

| +--rw shutdown?      empty
+--ro state
| +--ro interface-name?    -> /ipi-interface:interfaces/interface/name
| +--ro shutdown?         empty
| +--ro interface-config-error
| | +--ro router-id?      inet:ipv4-address
| | +--ro interface-index?  uint32
| | +--ro interface-instance-id?  uint8
| | +--ro error-type?      ipi-ospfv3-types:ospfv3_config_error_type_t
| | +--ro packet-type?     ipi-ospfv3-types:ospfv3_packet_type_t
| +--ro interface-state-change
| | +--ro router-id?      inet:ipv4-address
| | +--ro interface-index?  uint32
| | +--ro interface-instance-id?  uint8
| | +--ro interface-state?  ipi-ospfv3-types:ospfv3_interface_state_t
| +--ro interface-rx-bad-packet
|   +--ro router-id?      inet:ipv4-address
|   +--ro interface-index?  uint32
|   +--ro interface-instance-id?  uint8
|   +--ro packet-src?      inet:ipv6-address
|   +--ro packet-type?     ipi-ospfv3-types:ospfv3_packet_type_t
+--rw instances
  +--rw instance* [instance-id]
    +--rw instance-id      -> ../config/instance-id
    +--rw config
      +--rw instance-id?    uint8
      +--rw network-type?   ipi-ospfv3-types:ospfv3_network_type_t
      +--rw cost?           uint16
      +--rw priority?       uint8
      +--rw mtu?            uint16
      +--rw mtu-ignore?     empty
      +--rw enable-link-lsa-suppression?  empty
      +--rw enable-bfd?     boolean {feature-list:HAVE_BFD}?
      +--rw authentication-cryptomap? -> /ipi-ipsec:ipsec/crypto-maps/crypto-map/config/name {feature-
list:HAVE_IPSEC,feature-list:HAVE_TUNNEL}?
      +--ro state
      | +--ro statistics

```

---

---

```

| | +--ro neighbor-count?      uint32
| | +--ro adjacent-neighbor-count?  uint32
| | +--ro hello-due-in?        string
| | +--ro hello-in?            yang:counter64
| | +--ro hello-out?           yang:counter64
| | +--ro database-description-in? yang:counter64
| | +--ro database-description-out? yang:counter64
| | +--ro ls-request-in?       yang:counter64
| | +--ro ls-request-out?      yang:counter64
| | +--ro ls-update-in?        yang:counter64
| | +--ro ls-update-out?       yang:counter64
| | +--ro ls-ack-in?           yang:counter64
| | +--ro ls-ack-out?          yang:counter64
| | +--ro ls-ack-discarded?    yang:counter64
| +--ro instance-id?           uint8
| +--ro network-type?          ipi-ospfv3-types:ospfv3_network_type_t
| +--ro cost?                   uint16
| +--ro priority?               uint8
| +--ro mtu?                    uint16
| +--ro mtu-ignore?            empty
| +--ro enable-link-lsa-suppression? empty
| +--ro enable-bfd?             boolean {feature-list:HAVE_BFD}?
| +--ro authentication-cryptomap? -> /ipi-ipsec:ipsec/crypto-maps/crypto-map/config/name {feature-
list:HAVE_IPSEC,feature-list:HAVE_TUNNEL}?
| +--ro administrative-state?   ipi-ospfv3-types:ospfv3_interface_admin_state_t
| +--ro interface-index?        uint32
| +--ro interface-state?        ipi-ospfv3-types:ospfv3_interface_state_t
| +--ro address?                inet:ipv6-address
| +--ro link-local-address?      inet:ipv6-address
| +--ro router-id?              inet:ipv4-address
+--rw routers
| +--rw router* [ospfv3-id area-id]
|   +--rw ospfv3-id -> ../config/ospfv3-id
|   +--rw area-id -> ../config/area-id
|   +--rw config
|     | +--rw ospfv3-id? ipi-ospfv3-types:ospfv3_string_t
|     | +--rw area-id?  ipi-ospfv3-types:ospfv3_area_t

```

---

---

```

|   +--ro state
|   +--ro ospfv3-id?  ipi-ospfv3-types:ospfv3_string_t
|   +--ro area-id?    ipi-ospfv3-types:ospfv3_area_t
+--rw timers
| +--rw config
| | +--rw dead-interval?      uint16
| | +--rw hello-interval?    uint16
| | +--rw transmission-delay? uint16
| | +--rw retransmission-interval? uint16
| +--ro state
|   +--ro dead-interval?      uint16
|   +--ro hello-interval?    uint16
|   +--ro transmission-delay? uint16
|   +--ro retransmission-interval? uint16
+--rw neighbors-static
| +--rw neighbor-static* [address]
|   +--rw address  -> ../config/address
|   +--rw config
|   | +--rw address?      inet:ipv6-address
|   | +--rw cost?        uint16
|   | +--rw priority?    uint8
|   | +--rw poll-interval? uint32
|   +--ro state
|     +--ro address?      inet:ipv6-address
|     +--ro cost?        uint16
|     +--ro priority?    uint8
|     +--ro poll-interval? uint32
|     +--ro interface-state? string
+--ro designated-router
| +--ro state
|   +--ro router-id?  inet:ipv4-address
|   +--ro address?    inet:ipv6-address
+--ro backup-designated-router
| +--ro state
|   +--ro router-id?  inet:ipv4-address
|   +--ro address?    inet:ipv6-address

```

---

---

```

+--ro neighbor* [router-id]
  +--ro router-id  -> ../state/router-id
  +--ro state
    | +--ro statistics
    | | +--ro dead-timer-due-in?      string
    | | +--ro timer-dump?             string
    | | +--ro state-changes?          yang:counter64
    | | +--ro database-summary-count? yang:counter64
    | | +--ro ls-request-count?        yang:counter64
    | | +--ro ls-retransmission-count? yang:counter64
    | +--ro router-id?                 inet:ipv4-address
    | +--ro address?                   inet:ipv6-address
    | +--ro area-id?                   inet:ipv4-address
    | +--ro state?                     string
    | +--ro state-message?             string
    | +--ro bfd-enable?                empty {feature-list:HAVE_BFD}?
    | +--ro priority?                  uint8
    | +--ro neighbor-options?          ipi-ospfv3-types:ospfv3_ls_options_t
    | +--ro designated-router-router-id? inet:ipv4-address
    | +--ro backup-designated-router-router-id? inet:ipv4-address
  +--ro route* [prefix]
    +--ro prefix      -> ../state/prefix
    +--ro next-hop* [address]
      | +--ro address  -> ../state/address
      | +--ro state
        | +--ro address?      inet:ip-address
        | +--ro interface-name? string
        | +--ro transit-area? empty
        | +--ro area-id?      inet:ipv4-address
        | +--ro connected?    empty
        | +--ro invalid?      empty
        | +--ro code?         string
      +--ro state
        | +--ro prefix?      cml-data-types:cml_ip_prefix_t
        | +--ro distance?    uint8
      +--ro route-path

```

---

```

+--ro state
  +--ro type?          ipi-ospfv3-types:ospfv3_path_type_t
  +--ro code?          string
  +--ro discard-connection? empty
  +--ro cost?          uint32
  +--ro type-2-cost?    uint32
  +--ro path-flags?     ipi-ospfv3-types:ospfv3_path_flags_t

```

rpcs:

```

+---x ospfv3-terminal-debug-ospf-all-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
+---x ospfv3-terminal-debug-ospf-all-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
+---x ospfv3-terminal-debug-bfd-on {feature-list:HAVE_BFD}?
+---x ospfv3-terminal-debug-bfd-off {feature-list:HAVE_BFD}?
+---x ospfv3-terminal-debug-retransmission-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
+---x ospfv3-terminal-debug-retransmission-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
+---x ospfv3-terminal-debug-events-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w events   ipi-ospfv3-types:ospfv3_debug_event_t
+---x ospfv3-terminal-debug-events-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w events   ipi-ospfv3-types:ospfv3_debug_event_t
+---x ospfv3-terminal-debug-ifsm-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ifsm     ipi-ospfv3-types:ospfv3_debug_ifsm_t
+---x ospfv3-terminal-debug-ifsm-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ifsm     ipi-ospfv3-types:ospfv3_debug_ifsm_t
+---x ospfv3-terminal-debug-lsa-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w lsa      ipi-ospfv3-types:ospfv3_debug_lsa_t
+---x ospfv3-terminal-debug-lsa-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w lsa      ipi-ospfv3-types:ospfv3_debug_lsa_t
+---x ospfv3-terminal-debug-nfsm-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w nfsm     ipi-ospfv3-types:ospfv3_debug_nfsm_t

```



---

```
+---x ospfv3-terminal-debug-nfsm-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w nfsm   ipi-ospfv3-types:ospfv3_debug_nfsm_t
+---x ospfv3-terminal-debug-nsm-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w nsm    ipi-ospfv3-types:ospfv3_debug_nsm_t
+---x ospfv3-terminal-debug-nsm-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w nsm    ipi-ospfv3-types:ospfv3_debug_nsm_t
+---x ospfv3-terminal-debug-packet-all-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w all    ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-all-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w all    ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-hello-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w hello  ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-hello-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w hello  ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-dd-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w dd     ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-dd-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w dd     ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-ls-request-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ls-request  ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-ls-request-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ls-request  ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-ls-update-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ls-update   ipi-ospfv3-types:ospfv3_debug_packet_options_t
```

---

```

+---x ospfv3-terminal-debug-packet-ls-update-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ls-update   ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-ls-ack-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ls-ack   ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-packet-ls-ack-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w ls-ack   ipi-ospfv3-types:ospfv3_debug_packet_options_t
+---x ospfv3-terminal-debug-rib-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w rib   ipi-ospfv3-types:ospfv3_debug_rib_t
+---x ospfv3-terminal-debug-rib-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w rib   ipi-ospfv3-types:ospfv3_debug_rib_t
+---x ospfv3-terminal-debug-route-on {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w route   ipi-ospfv3-types:ospfv3_debug_route_t
+---x ospfv3-terminal-debug-route-off {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w route   ipi-ospfv3-types:ospfv3_debug_route_t
+---x ospfv3-clear-process {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w process-id   string
+---x ospfv3-clear-process-all {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
+---x ospfv3-graceful-restart {feature-list:HAVE_OSPF6D,feature-list:HAVE_IPV6}?
| +---w input
|   +---w grace-period   uint16
+---x ospfv3-snmp-restart {feature-list:HAVE_SNMP}?

```

notifications:

```

+---n ospfv3-originate-lsa
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address

```

---

```
| +--ro lsdb-area-id?   inet:ipv4-address
| +--ro lsdb-type?     uint32
| +--ro lsdb-id?       uint32
| +--ro lsdb-router-id? inet:ipv4-address
+---n ospfv3-tx-retransmit
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro if-index?      int32
| +--ro instance-id?   uint8
| +--ro neighbor-router-id? inet:ipv4-address
| +--ro packet-type?   ipi-ospfv3-types:ospfv3_packet_type_t
| +--ro lsdb-type?     uint32
| +--ro lsdb-ls-id?    uint32
| +--ro lsdb-router-id? inet:ipv4-address
+---n ospfv3-neighbor-state-change
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro if-index?      int32
| +--ro instance-id?   uint8
| +--ro neighbor-router-id? inet:ipv4-address
| +--ro neighbor-state? ipi-ospfv3-types:ospfv3_neighbor_state_change_t
+---n ospfv3-virtual-link-config-error
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-router-id? inet:ipv4-address
| +--ro area-id?       ipi-ospfv3-types:ospfv3_area_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro instance-id?   uint8
| +--ro error-type?    ipi-ospfv3-types:ospfv3_config_error_type_t
| +--ro packet-type?   ipi-ospfv3-types:ospfv3_packet_type_t
+---n ospfv3-virtual-link-state-change
```

---

---

```
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-router-id?  inet:ipv4-address
| +--ro area-id?       ipi-ospfv3-types:ospfv3_area_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro instance-id?    uint8
| +--ro virtual-link-state? ipi-ospfv3-types:ospfv3_interface_state_t
+---n ospfv3-virtual-link-neighbor-state-change
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-router-id?  inet:ipv4-address
| +--ro area-id?       ipi-ospfv3-types:ospfv3_area_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro instance-id?    uint8
| +--ro neighbor-state? ipi-ospfv3-types:ospfv3_interface_state_t
+---n ospfv3-virtual-link-rx-bad-packet
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-router-id?  inet:ipv4-address
| +--ro area-id?       ipi-ospfv3-types:ospfv3_area_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro instance-id?    uint8
| +--ro packet-type?    ipi-ospfv3-types:ospfv3_packet_type_t
+---n ospfv3-virtual-link-tx-retransmit
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro remote-router-id?  inet:ipv4-address
| +--ro area-id?       ipi-ospfv3-types:ospfv3_area_t
| +--ro ospfv3-id?     ipi-ospfv3-types:ospfv3_string_t
| +--ro router-id?     inet:ipv4-address
| +--ro instance-id?    uint8
| +--ro packet-type?    ipi-ospfv3-types:ospfv3_packet_type_t
| +--ro lsdb-type?     uint32
```

---

---

```
| +--ro lsdb-lsdb?      uint32
| +--ro lsdb-router-id? inet:ipv4-address
+---n ospfv3-interface-config-error
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro interface-name? string
| +--ro router-id?     inet:ipv4-address
| +--ro interface-index? uint32
| +--ro interface-instance-id? uint8
| +--ro error-type?    ipi-ospfv3-types:ospfv3_config_error_type_t
| +--ro packet-type?   ipi-ospfv3-types:ospfv3_packet_type_t
+---n ospfv3-interface-state-change
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro interface-name? string
| +--ro router-id?     inet:ipv4-address
| +--ro interface-index? uint32
| +--ro interface-instance-id? uint8
| +--ro interface-state? ipi-ospfv3-types:ospfv3_interface_state_t
+---n ospfv3-interface-rx-bad-packet
  +--ro severity?      cml-data-types:cml_notif_severity_t
  +--ro eventClass?    cml-data-types:cml_notif_class_t
  +--ro interface-name? string
  +--ro router-id?     inet:ipv4-address
  +--ro interface-index? uint32
  +--ro interface-instance-id? uint8
  +--ro packet-src?    inet:ipv6-address
  +--ro packet-type?   ipi-ospfv3-types:ospfv3_packet_type_t
```

---

## module: ipi-pim

```

+--rw pim
  +--rw debug {feature-list:HAVE_BFD}?
    | +--rw config
    | | +--rw bfd? empty
    | +--ro state
    | +--ro bfd? empty
    | +--ro terminal-debug-status? cml-data-types:cml_on_off_t
  +--rw ipv4
    | +--rw instances
    | | +--rw instance* [vrf-name]
    | | +--rw vrf-name -> ../config/vrf-name
    | | +--rw config
    | | | +--rw vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    | | | +--rw router-id? inet:ipv4-address {feature-list:HAVE_PIM_SM}?
    | | | +--rw join-prune-interval? uint16 {feature-list:HAVE_PIM_SM}?
    | | | +--rw ecmp-bundle* string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
    | | | +--rw enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
    | | +--ro state
    | | | +--ro vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    | | | +--ro router-id? inet:ipv4-address {feature-list:HAVE_PIM_SM}?
    | | | +--ro join-prune-interval? uint16 {feature-list:HAVE_PIM_SM}?
    | | | +--ro ecmp-bundle* string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
    | | | +--ro enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
    | | +--ro counters
    | | | +--ro joins-sent? yang:counter64
    | | | +--ro joins-received? yang:counter64

```

```

| | | +--ro rp-sets
| | |   +--ro rp-set* [group-address]
| | |     +--ro group-address  -> ../state/group-address
| | |     +--ro state
| | |       | +--ro group-address?  cml-data-types:cml_ipv4_addr_prefix_t
| | |       | +--ro fragment-tag?   uint16
| | |       | +--ro number-of-rp?   uint32
| | |       | +--ro expiration-time? string
| | |       +--ro rps
| | |         +--ro rp* [rp-address]
| | |           +--ro rp-address  -> ../state/rp-address
| | |           +--ro state
| | |             +--ro rp-address?  inet:ipv4-address
| | |             +--ro from?        inet:ipv4-address
| | |             +--ro mode?        ipi-pim-ipv4-types:pim_ipv4_rp_mode_t
| | |             +--ro type?        ipi-pim-ipv4-types:pim_ipv4_rp_type_t
| | |             +--ro priority?    uint8
| | |             +--ro hold-time?   uint16
| | |             +--ro up-time?     string
| | |             +--ro expiration-time? string
| | +--ro next-hop-destinations
| |   +--ro next-hop-destination* [destination-address]
| |     +--ro destination-address  -> ../state/destination-address
| |     +--ro state
| |       | +--ro destination-address?  inet:ipv4-address
| |       | +--ro destination-type?     ipi-pim-ipv4-types:pim_ipv4_next_hop_flags_t
| |       | +--ro next-hop-count?      uint32
| |       | +--ro preference?          uint16
| |       | +--ro metric?              uint32
| |       | +--ro reference-count?     uint32
| |       | +--ro route-type?          ipi-pim-ipv4-types:pim_ipv4_route_type_t
| |       | +--ro route-sub-type?      ipi-pim-ipv4-types:pim_ipv4_route_sub_type_t
| |       | +--ro subaddress-familiy-identfier? uint32
| |       | +--ro interface-index?     uint16
| |     +--ro next-hops
| |       +--ro next-hop* [ipv4-address]

```

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```

| | |   +--ro ipv4-address   -> ../state/ipv4-address
| | |   +--ro state
| | |       +--ro ipv4-address?      inet:ipv4-address
| | |       +--ro type?              ipi-pim-ipv4-types:pim_ipv4_next_hop_type_t
| | |       +--ro recursive-active-next-hop?  uint8
| | |       +--ro recursive-type?        ipi-pim-ipv4-types:pim_ipv4_next_hop_type_t
| | |       +--ro recursive-interface-id?   uint8
| | |       +--ro interface-index?        uint16
| | |       +--ro bfd-interface-index?    uint16
| | |       +--ro interface-name?        string
| | +--rw register-packet {feature-list:HAVE_PIM_SM}?
| | | +--rw config
| | | | +--rw register-reachability-check?  cml-data-types:cml_enable_disable_t
| | | | +--rw rate-limit?                  uint16
| | | | +--rw suppress-interval?           uint16
| | | | +--rw keep-alive-interval?         uint16
| | | | +--rw source-address?              ipi-pim-ipv4-types:pim_ipv4_reg_source_t
| | | | +--rw accept-register?            string
| | | | +--ro state
| | | |   +--ro register-reachability-check?  cml-data-types:cml_enable_disable_t
| | | |   +--ro rate-limit?                  uint16
| | | |   +--ro suppress-interval?          uint16
| | | |   +--ro keep-alive-interval?        uint16
| | | |   +--ro source-address?              ipi-pim-ipv4-types:pim_ipv4_reg_source_t
| | | |   +--ro accept-register?            string
| | | |   +--ro counters
| | | |       +--ro register-packet-received?  yang:counter64
| | | |       +--ro register-null-received?   yang:counter64
| | | |       +--ro register-stop-sent?       yang:counter64
| | | |       +--ro register-stop-received?   yang:counter64
| | +--rw interop
| | | +--rw config
| | | | +--rw ignore-rp-set-priority?  empty {feature-list:HAVE_PIM_SM}?
| | | | +--rw cisco-bsr-interop-enable?  empty {feature-list:HAVE_PIM_SM}?
| | | | +--ro state
| | | | +--ro ignore-rp-set-priority?  empty {feature-list:HAVE_PIM_SM}?

```

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```

| | | +--ro cisco-bsr-interop-enable? empty {feature-list:HAVE_PIM_SM}?
| | | +--rw register-packet
| | |   +--rw config!
| | |     +--rw cisco-register-checksum-enable empty {feature-list:HAVE_PIM_SM}?
| | |     +--rw access-control-list? string {feature-list:HAVE_PIM_SM}?
| | |   +--ro state
| | |     +--ro cisco-register-checksum-enable empty {feature-list:HAVE_PIM_SM}?
| | |     +--ro access-control-list? string {feature-list:HAVE_PIM_SM}?
| | +--rw spt-switch
| | | +--rw config!
| | | | +--rw enable empty {feature-list:HAVE_PIM_SM}?
| | | | +--rw access-control-list? string {feature-list:HAVE_PIM_SM}?
| | | | +--ro state
| | | |   +--ro enable empty {feature-list:HAVE_PIM_SM}?
| | | |   +--ro access-control-list? string {feature-list:HAVE_PIM_SM}?
| | +--rw ssm {feature-list:HAVE_PIM_SSM}?
| | | +--rw config
| | | | +--rw range-policy? ipi-pim-ipv4-types:pim_ipv4_ssm_range_policy_type_t
| | | | +--ro state
| | | |   +--ro range-policy? ipi-pim-ipv4-types:pim_ipv4_ssm_range_policy_type_t
| | +--rw anycast-rps {feature-list:HAVE_PIM_SM}?
| | | +--rw anycast-rp* [anycast-rp-address member-rp-address]
| | | | +--rw anycast-rp-address -> ../config/anycast-rp-address
| | | | +--rw member-rp-address -> ../config/member-rp-address
| | | | +--rw config
| | | | | +--rw anycast-rp-address? inet:ipv4-address
| | | | | +--rw member-rp-address? inet:ipv4-address
| | | | +--ro state
| | | |   +--ro anycast-rp-address? inet:ipv4-address
| | | |   +--ro member-rp-address? inet:ipv4-address
| | +--rw rendezvous-point
| | | +--rw static-rps
| | | | +--rw static-rps-default
| | | | | +--rw static-rp-default* [rp-address]
| | | | |   +--rw rp-address -> ../config/rp-address
| | | | |   +--rw config

```

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```

| | | | | +--rw rp-address?          inet:ipv4-address
| | | | | +--rw access-control-list?    string
| | | | | +--rw override-dynamically-learned-rp?  empty
| | | |   +--ro state
| | | |     +--ro rp-address?          inet:ipv4-address
| | | |     +--ro access-control-list?    string
| | | |     +--ro override-dynamically-learned-rp?  empty
| | | +--rw bootstrap-router
| | | | +--rw bsr-candidate
| | | |   +--rw config
| | | | | +--rw interface-name?  -> /ipi-interface:interfaces/interface/name
| | | | | +--rw hash-mask-length? uint8
| | | | | +--rw priority?        uint8
| | | |   +--ro state
| | | |     +--ro interface-name?  -> /ipi-interface:interfaces/interface/name
| | | |     +--ro hash-mask-length? uint8
| | | |     +--ro priority?        uint8
| | | +--rw rp-candidates
| | | | +--rw rp-candidate* [interface-name]
| | | |   +--rw interface-name  -> ../config/interface-name
| | | |   +--rw config
| | | | | +--rw interface-name?    -> /ipi-interface:interfaces/interface/name
| | | | | +--rw access-control-list?  string
| | | | | +--rw advertisement-interval? uint16
| | | | | +--rw priority?            uint8
| | | |   +--ro state
| | | |     +--ro interface-name?    -> /ipi-interface:interfaces/interface/name
| | | |     +--ro access-control-list?  string
| | | |     +--ro advertisement-interval? uint16
| | | |     +--ro priority?            uint8
| | +--rw msdp {feature-list:HAVE_PIM_MSDP}?
| | | +--rw config
| | | | +--rw originator-id?  string
| | | | +--ro state
| | | |   +--ro originator-id?          string
| | | |   +--ro source-active-entries-entries-count?  uint32

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```

| | | +--rw source-active-entries
| | | | +--rw source-active-entry* [source-address group-address]
| | | |   +--rw source-address  -> ../config/source-address
| | | |   +--rw group-address   -> ../config/group-address
| | | |   +--rw config
| | | | | +--rw source-address?  inet:ipv4-address
| | | | | +--rw group-address?   inet:ipv4-address
| | | | | +--rw rp-address       inet:ipv4-address
| | | | +--ro state
| | | |   +--ro source-address?   inet:ipv4-address
| | | |   +--ro group-address?    inet:ipv4-address
| | | |   +--ro rp-address        inet:ipv4-address
| | | |   +--ro static-configured? empty
| | | |   +--ro uptime?          string
| | | |   +--ro expire-time?     uint32
| | | |   +--ro stopped?         empty
| | | |   +--ro sa-rp-forward-count? yang:counter64
| | | |   +--ro reverse-path-forwarding-peer? inet:ipv4-address
| | | +--rw peers
| | | | +--rw peer* [address]
| | | |   +--rw address          -> ../config/address
| | | |   +--rw config
| | | | | +--rw address?         inet:ipv4-address
| | | | | +--rw source-address?  ipi-pim-ipv4-types:pim_ipv4_reg_source_t
| | | | | +--rw mesh-group?     string
| | | | | +--rw default-peer?   empty
| | | | | +--rw prefix-list?    ipi-pim-ipv4-types:pim_ipv4_msdp_peer_acl_t
| | | | +--ro state
| | | | | +--ro counters
| | | | | | +--ro keepalives-sent? yang:counter64
| | | | | | +--ro keepalives-received? yang:counter64
| | | | | | +--ro connection-retries? yang:counter64
| | | | | +--ro address?         inet:ipv4-address
| | | | | +--ro source-address?  ipi-pim-ipv4-types:pim_ipv4_reg_source_t
| | | | | +--ro mesh-group?     string
| | | | | +--ro default-peer?   empty

```

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```

| | | | +--ro prefix-list?    ipi-pim-ipv4-types:pim_ipv4_msdp_peer_acl_t
| | | | +--ro peer-state?    ipi-pim-ipv4-types:pim_ipv4_msdp_peer_state_t
| | | | +--ro peer-role?    ipi-pim-ipv4-types:pim_ipv4_msdp_peer_role_t
| | |   +--rw authentication
| | |   +--rw config
| | |   | +--rw password?  string {feature-list:HAVE_TCP_MD5SIG}?
| | |   +--ro state
| | |   | +--ro password?  string {feature-list:HAVE_TCP_MD5SIG}?
| | +--rw debug
| | | +--rw config
| | | | +--rw options? ipi-pim-ipv4-types:pim_ipv4_debug_t
| | | | +--ro state
| | | | +--ro options?      ipi-pim-ipv4-types:pim_ipv4_debug_t
| | | | +--ro terminal-debug-status? ipi-pim-ipv4-types:pim_ipv4_debug_t
| | +--ro multicast-route-table
| |   +--ro state
| |   | +--ro counters
| |   | | +--ro xxrp-entries?  yang:counter32
| |   | | +--ro g-prefix-entries? yang:counter32
| |   | | +--ro xg-entries?    yang:counter32
| |   | | +--ro sg-entries?    yang:counter32
| |   | | +--ro sg-rpt-entries? yang:counter32
| |   | | +--ro fcr-entries?   yang:counter32
| |   +--ro multicast-routes
| |   | +--ro multicast-route* [source-address group-address type]
| |   | | +--ro source-address    -> ../state/source-address
| |   | | +--ro group-address     -> ../state/group-address
| |   | | +--ro type              -> ../state/type
| |   | +--ro state
| |   | | +--ro source-address?    inet:ipv4-address
| |   | | +--ro group-address?    inet:ipv4-address
| |   | | +--ro mode?             ipi-pim-ipv4-types:pim_ipv4_multicast_route_mode_t
| |   | | +--ro type?             ipi-pim-ipv4-types:pim_ipv4_multicast_route_type_t
| |   | | +--ro uptime?          string
| |   | | +--ro next-hop-address?  inet:ipv4-address
| |   | | +--ro next-hop-interface-name? string

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```

| |      | +--ro last-rendezvous-point?  inet:ipv4-address
| |      | +--ro spt-switch?             empty
| |      | +--ro local-olist*            string
| |      | +--ro joined-olist*           string
| |      | +--ro inherited-olist*        string
| |      | +--ro pruned-olist*           string
| |      +--ro upstream-xxrp
| |      | +--ro state
| |      |   +--ro route-state?          ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_state_t
| |      |   +--ro join-prune-timer?     uint32
| |      |   +--ro last-rpf-neighbor-address?  inet:ipv4-address
| |      |   +--ro last-rpf-next-hop-address? inet:ipv4-address
| |      |   +--ro macro-state?          ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_macro_state_t
{feature-list:HAVE_PIM_SM}?
| |      +--ro upstream-xg
| |      | +--ro state
| |      |   +--ro route-state?          ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_state_t
| |      |   +--ro join-prune-timer?     uint32
| |      |   +--ro last-rpf-neighbor-address?  inet:ipv4-address
| |      |   +--ro macro-state?          ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_macro_state_t
{feature-list:HAVE_PIM_SM}?
| |      +--ro upstream-sg
| |      | +--ro state
| |      |   +--ro route-state?          ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_state_t
| |      |   +--ro join-prune-timer?     uint32
| |      |   +--ro last-rpf-neighbor-address?  inet:ipv4-address
| |      |   +--ro keep-alive-timer?      uint32
| |      |   +--ro spt-switch?           empty
| |      |   +--ro macro-state?          ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_macro_state_t
{feature-list:HAVE_PIM_SM}?
| |      +--ro upstream-sg-rpt
| |      | +--ro state
| |      |   +--ro route-state?  ipi-pim-ipv4-types:pim_ipv4_multicast_route_upstream_sg_rpt_mode_t
| |      |   +--ro override-timer? uint32
| |      +--ro forwarding-cache-registers
| |      | +--ro forwarding-cache-register* [address]
| |      |   +--ro address  -> ../state/address

```

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```

| | | +--ro state
| | | | +--ro address?      inet:ipv4-address
| | | | +--ro keep-alive-timer? uint32
| | | | +--ro inherited-olist* string
| | | +--ro downstream-interfaces
| | | | +--ro downstream-interface* [interface-name]
| | | | | +--ro interface-name      -> ../state/interface-name
| | | | +--ro state
| | | | | +--ro interface-name? string
| | | | +--ro downstream-xg-sg
| | | | | +--ro state
| | | | | | +--ro route-state?      ipi-pim-ipv4-types:pim_ipv4_multicast_route_downstream_state_t
| | | | | | +--ro expiry-timer?    uint32
| | | | | | +--ro prune-pending-timer? uint32
| | | | | +--ro assert-state?      ipi-pim-ipv4-types:pim_ipv4_multicast_route_downstream_assert_state_t
| | | | | | +--ro assert-timer?    uint32
| | | | | | +--ro winner-address?  inet:ipv4-address
| | | | | | +--ro metric?          uint32
| | | | | | +--ro preference?      uint32
| | | | | | +--ro rpt-bit?         empty
| | | | | +--ro macro-state?      ipi-pim-ipv4-types:pim_ipv4_multicast_route_downstream_macro_state_t
| | | | +--ro downstream-xxrp-sg-rpt
| | | | | +--ro state
| | | | | | +--ro route-state?      ipi-pim-ipv4-types:pim_ipv4_multicast_route_downstream_state_t
| | | | | | +--ro rpt-state?        ipi-pim-ipv4-types:pim_ipv4_multicast_route_downstream_rpt_state_t
| | | | | | +--ro expiry-timer?    uint32
| | | | | | +--ro prune-pending-timer? uint32
| | +--rw interfaces
| | | +--rw interface* [name]
| | | | +--rw name      -> ../config/name
| | | | +--rw config
| | | | | +--rw name?          -> /ipi-interface:interfaces/interface/name
| | | | | +--rw pim-mode?      ipi-pim-ipv4-types:pim_ipv4_mode_t
| | | | | +--rw bsr-border?    empty {feature-list:HAVE_PIM_SM}?
| | | | | +--rw dr-priority?   uint32
| | | | | +--rw hello-interval? uint16

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```

|   | +--rw hello-holdtime?          uint16
|   | +--rw passive-enable?          empty
|   | +--rw exclude-generated-id?    empty {feature-list:HAVE_PIM_SM}?
|   | +--rw unicast-bootstrap-router? empty {feature-list:HAVE_PIM_SM}?
|   | +--rw neighbor-access-control-list-filter? string
|   | +--rw state-refresh-origination-interval? uint16 {feature-list:HAVE_PIM_DM}?
|   | +--rw ecmp-bundle?              string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
|   | +--rw propagation-delay?        uint16
|   | +--rw enable-bfd?               cml-data-types:cml_enable_disable_t {feature-list:HAVE_BFD}?
|   +--ro state
|   | +--ro name?                     -> /ipi-interface:interfaces/interface/name
|   | +--ro pim-mode?                 ipi-pim-ipv4-types:pim_ipv4_mode_t
|   | +--ro bsr-border?               empty {feature-list:HAVE_PIM_SM}?
|   | +--ro dr-priority?              uint32
|   | +--ro hello-interval?           uint16
|   | +--ro hello-holdtime?           uint16
|   | +--ro passive-enable?           empty
|   | +--ro exclude-generated-id?     empty {feature-list:HAVE_PIM_SM}?
|   | +--ro unicast-bootstrap-router? empty {feature-list:HAVE_PIM_SM}?
|   | +--ro neighbor-access-control-list-filter? string
|   | +--ro state-refresh-origination-interval? uint16 {feature-list:HAVE_PIM_DM}?
|   | +--ro ecmp-bundle?              string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
|   | +--ro propagation-delay?        uint16
|   | +--ro enable-bfd?               cml-data-types:cml_enable_disable_t {feature-list:HAVE_BFD}?
|   | +--ro next-hello?               string
|   | +--ro router-id?                inet:ipv4-address
|   | +--ro local-id?                 uint32
|   | +--ro dr-address?                inet:ipv4-address
|   +--ro neighbors
|   | +--ro neighbor* [address]
|   |   +--ro address -> ../state/address
|   |   +--ro state
|   |     +--ro address?              inet:ipv4-address
|   |     +--ro designated-router?    empty
|   |     +--ro neighbor-established? string
|   |     +--ro neighbor-expires?     string

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```

|   |   +--ro secondary-address*    inet:ipv4-address
|   |   +--ro hello-holdtime?       uint16
|   |   +--ro lan-delay?            uint16
|   |   +--ro override-interval?    uint32
|   |   +--ro dr-priority?          uint32 {feature-list:HAVE_PIM_SM}?
|   |   +--ro generated-id?         uint32
|   |   +--ro router-id?            inet:ipv4-address
|   |   +--ro local-id?            uint32
|   |   +--ro tracking-support?     empty
|   |   +--ro ecmp-redirect-enabled? empty {feature-list:HAVE_PIM_ECMP_REDIRECT}?
|   +--rw pim-redundancy
|       +--rw vrrp {feature-list:HAVE_PIM_SM_VRRP_AWARE}?
|           +--rw config!
|               | +--rw virtual-router-id  uint8
|               | +--rw dr-priority        uint32
|               +--ro state
|                   +--ro virtual-router-id  uint8
|                   +--ro dr-priority        uint32
|                   +--ro selected-dr-priority? uint32
|                   +--ro vrrp-master?      boolean
+--rw ipv6
    +--rw instances
    |   +--rw instance* [vrf-name]
    |       +--rw vrf-name          -> ../config/vrf-name
    |       +--rw config
    |   |   +--rw vrf-name?          -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    |   |   |   +--rw router-id?          inet:ipv4-address {feature-list:HAVE_PIM_SM}?
    |   |   |   +--rw join-prune-interval? uint16 {feature-list:HAVE_PIM_SM}?
    |   |   |   +--rw ecmp-bundle*        string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
    |   |   |   +--rw enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
    |   |   +--ro state
    |   |   +--ro vrf-name?            -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name
    |   |       +--ro router-id?          inet:ipv4-address {feature-list:HAVE_PIM_SM}?
    |   |       +--ro join-prune-interval? uint16 {feature-list:HAVE_PIM_SM}?
    |   |       +--ro ecmp-bundle*        string {feature-list:HAVE_PIM_ECMP_REDIRECT}?

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```

| | +--ro enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
| | +--ro counters
| | | +--ro joins-sent? yang:counter64
| | | +--ro joins-received? yang:counter64
| | +--ro rp-sets
| |   +--ro rp-set* [group-address]
| |     +--ro group-address -> ../state/group-address
| |     +--ro state
| |       | +--ro group-address? cml-data-types:cml_ipv6_prefix_t
| |       | +--ro fragment-tag? uint16
| |       | +--ro number-of-rp? uint32
| |       | +--ro expiration-time? string
| |       +--ro rps
| |         +--ro rp* [rp-address]
| |           +--ro rp-address -> ../state/rp-address
| |           +--ro state
| |             +--ro rp-address? inet:ipv6-address
| |             +--ro from? inet:ipv6-address
| |             +--ro mode? ipi-pim-ipv6-types:pim_ipv6_rp_mode_t
| |             +--ro type? ipi-pim-ipv6-types:pim_ipv6_rp_type_t
| |             +--ro priority? uint8
| |             +--ro hold-time? uint16
| |             +--ro up-time? string
| |             +--ro expiration-time? string
| +--ro next-hop-destinations
| | +--ro next-hop-destination* [destination-address]
| |   +--ro destination-address -> ../state/destination-address
| |   +--ro state
| |     | +--ro destination-address? inet:ipv6-address
| |     | +--ro destination-type? ipi-pim-ipv6-types:pim_ipv6_next_hop_flags_t
| |     | +--ro next-hop-count? uint32
| |     | +--ro preference? uint16
| |     | +--ro metric? uint32
| |     | +--ro reference-count? uint32
| |     | +--ro route-type? ipi-pim-ipv6-types:pim_ipv6_route_type_t
| |     | +--ro route-sub-type? ipi-pim-ipv6-types:pim_ipv6_route_sub_type_t

```

---

---

```
| | | +--ro subaddress-family-identifier? uint32
| | | +--ro interface-index?          uint16
| | +--ro next-hops
| |   +--ro next-hop* [ipv6-address]
| |     +--ro ipv6-address  -> ../state/ipv6-address
| |     +--ro state
| |       +--ro ipv6-address?      inet:ipv6-address
| |       +--ro type?              ipi-pim-ipv6-types:pim_ipv6_next_hop_type_t
| |       +--ro recursive-active-next-hop? uint8
| |       +--ro recursive-type?      ipi-pim-ipv6-types:pim_ipv6_next_hop_type_t
| |       +--ro recursive-interface-id? uint8
| |       +--ro interface-index?    uint16
| |       +--ro bfd-interface-index? uint16
| |       +--ro interface-name?     string
| +--rw register-packet {feature-list:HAVE_PIM_SM}?
| | +--rw config
| | | +--rw register-reachability-check? cml-data-types:cml_enable_disable_t
| | | +--rw rate-limit?                uint16
| | | +--rw suppress-interval?         uint16
| | | +--rw keep-alive-interval?       uint16
| | | +--rw source-address?            ipi-pim-ipv6-types:pim_ipv6_reg_source_t
| | | +--rw accept-register?          string
| | +--ro state
| |   +--ro register-reachability-check? cml-data-types:cml_enable_disable_t
| |   +--ro rate-limit?                uint16
| |   +--ro suppress-interval?         uint16
| |   +--ro keep-alive-interval?       uint16
| |   +--ro source-address?            ipi-pim-ipv6-types:pim_ipv6_reg_source_t
| |   +--ro accept-register?          string
| |   +--ro counters
| |     +--ro register-packet-received? yang:counter64
| |     +--ro register-null-received?  yang:counter64
| |     +--ro register-stop-sent?      yang:counter64
| |     +--ro register-stop-received?  yang:counter64
| +--rw interop
| | +--rw config
```

---

```

| | | +--rw ignore-rp-set-priority?  empty {feature-list:HAVE_PIM_SM}?
| | | +--rw cisco-bsr-interop-enable?  empty {feature-list:HAVE_PIM_SM}?
| | +--ro state
| | | +--ro ignore-rp-set-priority?  empty {feature-list:HAVE_PIM_SM}?
| | | +--ro cisco-bsr-interop-enable?  empty {feature-list:HAVE_PIM_SM}?
| | +--rw register-packet
| |   +--rw config!
| |     | +--rw cisco-register-checksum-enable  empty {feature-list:HAVE_PIM_SM}?
| |     | +--rw access-control-list?          string {feature-list:HAVE_PIM_SM}?
| |     +--ro state
| |       +--ro cisco-register-checksum-enable  empty {feature-list:HAVE_PIM_SM}?
| |       +--ro access-control-list?          string {feature-list:HAVE_PIM_SM}?
| +--rw spt-switch
| | +--rw config!
| | | +--rw enable  empty {feature-list:HAVE_PIM_SM}?
| | | +--rw access-control-list?  string {feature-list:HAVE_PIM_SM}?
| | +--ro state
| |   +--ro enable  empty {feature-list:HAVE_PIM_SM}?
| |   +--ro access-control-list?  string {feature-list:HAVE_PIM_SM}?
| +--rw ssm {feature-list:HAVE_PIM_SSM}?
| | +--rw config
| | | +--rw range-policy?  ipi-pim-ipv6-types:pim_ipv6_ssm_range_policy_type_t
| | +--ro state
| |   +--ro range-policy?  ipi-pim-ipv6-types:pim_ipv6_ssm_range_policy_type_t
| +--rw anycast-rps {feature-list:HAVE_PIM_SM}?
| | +--rw anycast-rp* [anycast-rp-address member-rp-address]
| |   +--rw anycast-rp-address  -> ../config/anycast-rp-address
| |   +--rw member-rp-address  -> ../config/member-rp-address
| |   +--rw config
| |     | +--rw anycast-rp-address?  inet:ipv6-address
| |     | +--rw member-rp-address?  inet:ipv6-address
| |     +--ro state
| |       +--ro anycast-rp-address?  inet:ipv6-address
| |       +--ro member-rp-address?  inet:ipv6-address
| +--rw rendezvous-point
| | +--rw config

```

```
| | | +--rw embed-rp? cml-data-types:cml_enable_disable_t
| | +--ro state
| | | +--ro embed-rp? cml-data-types:cml_enable_disable_t
| | +--rw static-rps
| | | +--rw static-rps-default
| | |   +--rw static-rp-default* [rp-address]
| | |     +--rw rp-address -> ../config/rp-address
| | |     +--rw config
| | |       | +--rw rp-address?          inet:ipv6-address
| | |       | +--rw access-control-list? string
| | |       | +--rw override-dynamically-learned-rp? empty
| | |       +--ro state
| | |         +--ro rp-address?          inet:ipv6-address
| | |         +--ro access-control-list? string
| | |         +--ro override-dynamically-learned-rp? empty
| | +--rw bootstrap-router
| | | +--rw bsr-candidate
| | |   +--rw config
| | |     | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
| | |     | +--rw hash-mask-length? uint8
| | |     | +--rw priority?        uint8
| | |     +--ro state
| | |       +--ro interface-name? -> /ipi-interface:interfaces/interface/name
| | |       +--ro hash-mask-length? uint8
| | |       +--ro priority?        uint8
| | +--rw rp-candidates
| |   +--rw rp-candidate* [interface-name]
| |     +--rw interface-name -> ../config/interface-name
| |     +--rw config
| |       | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
| |       | +--rw access-control-list? string
| |       | +--rw advertisement-interval? uint16
| |       | +--rw priority?          uint8
| |       +--ro state
| |         +--ro interface-name? -> /ipi-interface:interfaces/interface/name
| |         +--ro access-control-list? string
```

---

```

| |      +--ro advertisement-interval?  uint16
| |      +--ro priority?                uint8
| +--rw debug
| | +--rw config
| | | +--rw options? ipi-pim-ipv6-types:pim_ipv6_debug_t
| | | +--ro state
| | |   +--ro options?          ipi-pim-ipv6-types:pim_ipv6_debug_t
| | |   +--ro terminal-debug-status? ipi-pim-ipv6-types:pim_ipv6_debug_t
| +--ro multicast-route-table
|   +--ro state
|   | +--ro counters
|   | | +--ro xxrp-entries?  yang:counter32
|   | | +--ro g-prefix-entries? yang:counter32
|   | | +--ro xg-entries?    yang:counter32
|   | | +--ro sg-entries?    yang:counter32
|   | | +--ro sg-rpt-entries? yang:counter32
|   | | +--ro fcr-entries?   yang:counter32
|   +--ro multicast-routes
|     +--ro multicast-route* [source-address group-address type]
|       +--ro source-address      -> ../state/source-address
|       +--ro group-address       -> ../state/group-address
|       +--ro type                -> ../state/type
|       +--ro state
|         | +--ro source-address?    inet:ipv6-address
|         | +--ro group-address?    inet:ipv6-address
|         | +--ro mode?             ipi-pim-ipv6-types:pim_ipv6_multicast_route_mode_t
|         | +--ro type?             ipi-pim-ipv6-types:pim_ipv6_multicast_route_type_t
|         | +--ro uptime?          string
|         | +--ro next-hop-address?  inet:ipv6-address
|         | +--ro next-hop-interface-name? string
|         | +--ro last-rendezvous-point? inet:ipv6-address
|         | +--ro spt-switch?       empty
|         | +--ro local-olist*      string
|         | +--ro joined-olist*     string
|         | +--ro inherited-olist*  string
|         | +--ro pruned-olist*     string

```

---

---

```

|      +--ro upstream-xxrp
|      | +--ro state
|      |   +--ro route-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_state_t
|      |   +--ro join-prune-timer?  uint32
|      |   +--ro last-rpf-neighbor-address?  inet:ipv6-address
|      |   +--ro last-rpf-next-hop-address?  inet:ipv6-address
|      |   +--ro macro-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_macro_state_t
{feature-list:HAVE_PIM_SM}?
|      +--ro upstream-xg
|      | +--ro state
|      |   +--ro route-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_state_t
|      |   +--ro join-prune-timer?  uint32
|      |   +--ro last-rpf-neighbor-address?  inet:ipv6-address
|      |   +--ro macro-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_macro_state_t
{feature-list:HAVE_PIM_SM}?
|      +--ro upstream-sg
|      | +--ro state
|      |   +--ro route-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_state_t
|      |   +--ro join-prune-timer?  uint32
|      |   +--ro last-rpf-neighbor-address?  inet:ipv6-address
|      |   +--ro keep-alive-timer?  uint32
|      |   +--ro spt-switch?        empty
|      |   +--ro macro-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_macro_state_t
{feature-list:HAVE_PIM_SM}?
|      +--ro upstream-sg-rpt
|      | +--ro state
|      |   +--ro route-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_upstream_sgrpt_mode_t
|      |   +--ro override-timer?  uint32
|      +--ro forwarding-cache-registers
|      | +--ro forwarding-cache-register* [address]
|      |   +--ro address  -> ../state/address
|      |   +--ro state
|      |     +--ro address?      inet:ipv6-address
|      |     +--ro keep-alive-timer?  uint32
|      |     +--ro inherited-olist*  string
|      +--ro downstream-interfaces
|      | +--ro downstream-interface* [interface-name]

```

---

---

```

|      +--ro interface-name      -> ../state/interface-name
|      +--ro state
|      | +--ro interface-name?  string
|      +--ro downstream-xg-sg
|      | +--ro state
|      |   +--ro route-state?    ipi-pim-ipv6-types:pim_ipv6_multicast_route_downstream_state_t
|      |   +--ro expiry-timer?   uint32
|      |   +--ro prune-pending-timer? uint32
|      |   +--ro assert-state?   ipi-pim-ipv6-types:pim_ipv6_multicast_route_downstream_assert_state_t
|      |   +--ro assert-timer?   uint32
|      |   +--ro winner-address?  inet:ipv6-address
|      |   +--ro metric?         uint32
|      |   +--ro preference?     uint32
|      |   +--ro rpt-bit?        empty
|      |   +--ro macro-state?    ipi-pim-ipv6-types:pim_ipv6_multicast_route_downstream_macro_state_t
|      +--ro downstream-xxrp-sg-rpt
|      +--ro state
|          +--ro route-state?    ipi-pim-ipv6-types:pim_ipv6_multicast_route_downstream_state_t
|          +--ro rpt-state?      ipi-pim-ipv6-types:pim_ipv6_multicast_route_downstream_rpt_state_t
|          +--ro expiry-timer?   uint32
|          +--ro prune-pending-timer? uint32
+--rw interfaces
+--rw interface* [name]
+--rw name      -> ../config/name
+--rw config
| +--rw name?          -> /ipi-interface:interfaces/interface/name
| +--rw pim-mode?      ipi-pim-ipv6-types:pim_ipv6_mode_t
| +--rw bsr-border?    empty {feature-list:HAVE_PIM_SM}?
| +--rw dr-priority?   uint32
| +--rw hello-interval? uint16
| +--rw hello-holdtime? uint16
| +--rw passive-enable? empty
| +--rw exclude-generated-id? empty {feature-list:HAVE_PIM_SM}?
| +--rw unicast-bootstrap-router? empty {feature-list:HAVE_PIM_SM}?
| +--rw neighbor-access-control-list-filter? string
| +--rw state-refresh-origination-interval? uint16 {feature-list:HAVE_PIM_DM}?

```

---

---

```

| +--rw ecmp-bundle?                string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
| +--rw propagation-delay?          uint16
| +--rw enable-bfd?                 cml-data-types:cml_enable_disable_t {feature-list:HAVE_BFD}?
+--ro state
| +--ro name?                       -> /ipi-interface:interfaces/interface/name
| +--ro pim-mode?                   ipi-pim-ipv6-types:pim_ipv6_mode_t
| +--ro bsr-border?                 empty {feature-list:HAVE_PIM_SM}?
| +--ro dr-priority?                uint32
| +--ro hello-interval?             uint16
| +--ro hello-holdtime?             uint16
| +--ro passive-enable?             empty
| +--ro exclude-generated-id?       empty {feature-list:HAVE_PIM_SM}?
| +--ro unicast-bootstrap-router?   empty {feature-list:HAVE_PIM_SM}?
| +--ro neighbor-access-control-list-filter? string
| +--ro state-refresh-origination-interval? uint16 {feature-list:HAVE_PIM_DM}?
| +--ro ecmp-bundle?                string {feature-list:HAVE_PIM_ECMP_REDIRECT}?
| +--ro propagation-delay?          uint16
| +--ro enable-bfd?                 cml-data-types:cml_enable_disable_t {feature-list:HAVE_BFD}?
| +--ro next-hello?                 string
| +--ro router-id?                  inet:ipv4-address
| +--ro local-id?                   uint32
| +--ro dr-address?                 inet:ipv6-address
+--ro neighbors
  +--ro neighbor* [address]
    +--ro address -> ../state/address
    +--ro state
      +--ro address?                 inet:ipv6-address
      +--ro designated-router?       empty
      +--ro neighbor-established?     string
      +--ro neighbor-expires?         string
      +--ro secondary-address*        inet:ipv6-address
      +--ro hello-holdtime?           uint16
      +--ro lan-delay?                uint16
      +--ro override-interval?        uint32
      +--ro dr-priority?              uint32 {feature-list:HAVE_PIM_SM}?
      +--ro generated-id?             uint32

```

---



```

+--ro router-id?          inet:ipv4-address
+--ro local-id?           uint32
+--ro tracking-support?   empty
+--ro ecmp-redirect-enabled? empty {feature-list:HAVE_PIM_ECMP_REDIRECT}?

```

rpcs:

```

+---x pim-snmp-restart {feature-list:HAVE_SNMP}?
+---x pim-ipv4-clear-bsr-rendezvous-point {feature-list:HAVE_PIM_IPV4,feature-list:HAVE_PIM_SM}?
| +---w input
|   +---w vrf-name?  string
|   +---w pim-mode   ipi-pim-ipv4-types:pim_ipv4_mode_clear_bsr_rp_t
+---x pim-ipv4-clear-multicast-route {feature-list:HAVE_PIM_IPV4}?
| +---w input
|   +---w vrf-name?  string
|   +---w pim-mode   ipi-pim-ipv4-types:pim_ipv4_mode_t
+---x pim-ipv4-clear-multicast-route-source-group {feature-list:HAVE_PIM_IPV4}?
| +---w input
|   +---w vrf-name?   string
|   +---w group-address  inet:ipv4-address
+---x pim-ipv4-clear-multicast-route-source-group-mode {feature-list:HAVE_PIM_IPV4}?
| +---w input
|   +---w vrf-name?     string
|   +---w group-address  inet:ipv4-address
|   +---w source-address  inet:ipv4-address
|   +---w pim-mode       ipi-pim-ipv4-types:pim_ipv4_mode_t
+---x pim-ipv4-clear-msdp-peer {feature-list:HAVE_PIM_IPV4,feature-list:HAVE_PIM_MSDP_API}?
| +---w input
|   +---w vrf-name?  string
|   +---w address    inet:ipv4-address
+---x pim-ipv4-clear-msdp-sa-cache {feature-list:HAVE_PIM_IPV4,feature-list:HAVE_PIM_MSDP_API}?
| +---w input
|   +---w vrf-name?   string
|   +---w group-address  inet:ipv4-address
+---x pim-ipv4-terminal-debug-on {feature-list:HAVE_PIM_IPV4}?
| +---w input
|   +---w vrf-name?     string

```

---

```
| +---w terminal-debug-options ipi-pim-ipv4-types:pim_ipv4_debug_t
+---x pim-ipv4-terminal-debug-off {feature-list:HAVE_PIM_IPV4}?
| +---w input
| +---w vrf-name? string
| +---w terminal-debug-options ipi-pim-ipv4-types:pim_ipv4_debug_t
+---x pim-ipv4-terminal-debug-all-on {feature-list:HAVE_PIM_IPV4}?
| +---w input
| +---w vrf-name? string
+---x pim-ipv4-terminal-debug-all-off {feature-list:HAVE_PIM_IPV4}?
| +---w input
| +---w vrf-name? string
+---x pim-ipv6-clear-bsr-rendezvous-point {feature-list:HAVE_PIM_IPV6,feature-list:HAVE_PIM_SM}?
| +---w input
| +---w vrf-name? string
| +---w pim-mode ipi-pim-ipv6-types:pim_ipv6_mode_clear_bsr_rp_t
+---x pim-ipv6-clear-multicast-route {feature-list:HAVE_PIM_IPV6}?
| +---w input
| +---w vrf-name? string
| +---w pim-mode ipi-pim-ipv6-types:pim_ipv6_mode_t
+---x pim-ipv6-clear-multicast-route-source-group {feature-list:HAVE_PIM_IPV6}?
| +---w input
| +---w vrf-name? string
| +---w group-address inet:ipv6-address
+---x pim-ipv6-clear-multicast-route-source-group-mode {feature-list:HAVE_PIM_IPV6}?
| +---w input
| +---w vrf-name? string
| +---w group-address inet:ipv6-address
| +---w source-address inet:ipv6-address
| +---w pim-mode ipi-pim-ipv6-types:pim_ipv6_mode_t
+---x pim-terminal-debug-bfd-on {feature-list:HAVE_PIMD,feature-list:HAVE_PIM_IPV4,feature-
list:HAVE_PIM_IPV4_OR_HAVE_PIM_IPV6}?
+---x pim-terminal-debug-bfd-off {feature-list:HAVE_PIMD,feature-list:HAVE_PIM_IPV4,feature-
list:HAVE_PIM_IPV4_OR_HAVE_PIM_IPV6}?
+---x pim-ipv6-terminal-debug-on {feature-list:HAVE_PIM_IPV6}?
| +---w input
| +---w vrf-name? string
| +---w terminal-debug-options ipi-pim-ipv6-types:pim_ipv6_debug_t
```

---

```

+---x pim-ipv6-terminal-debug-off {feature-list:HAVE_PIM_IPV6}?
| +---w input
|   +---w vrf-name?      string
|   +---w terminal-debug-options  ipi-pim-ipv6-types:pim_ipv6_debug_t
+---x pim-ipv6-terminal-debug-all-on {feature-list:HAVE_PIM_IPV6}?
| +---w input
|   +---w vrf-name?  string
+---x pim-ipv6-terminal-debug-all-off {feature-list:HAVE_PIM_IPV6}?
  +---w input
    +---w vrf-name?  string

```

---

## module: ipi-ping

```

+--rw ping
  +--ro test-result* [test-name]
    +--ro test-name      -> ../state/test-name
    +--ro replies* [sequence-number]
      | +--ro sequence-number  -> ../state/sequence-number
      | +--ro state
      |   +--ro sequence-number?  uint32
      |   +--ro ttl-or-hop-limit?  uint8
      |   +--ro round-trip-time?  decimal64
      |   +--ro result?          ipi-ping-types:ping_packet_result_t
  +--ro state
    | +--ro test-name?  string
    | +--ro test-status? ipi-ping-types:ping_test_status_t
    | +--ro start-time?  yang:date-and-time
    | +--ro end-time?    yang:date-and-time
  +--ro test-parameters
    | +--ro state
    |   +--ro destination?  string
    |   +--ro protocol?     ipi-ping-types:ping_ip_protocol_t
    |   +--ro vrf-name?     string
    |   +--ro repeat-count?  uint32
    |   +--ro interval?     uint16

```

---

```
|  +--ro time-to-live?  uint8
|  +--ro datagram-size? uint32
|  +--ro timeout?       uint32
|  +--ro deadline?      uint32
+--ro summary-info
  +--ro state
    +--ro packets-transmitted? uint32
    +--ro packets-received?    uint32
    +--ro success-rate?        uint8
    +--ro loss-rate?           uint8
    +--ro min-rtt?             decimal64
    +--ro rtt-avg?             decimal64
    +--ro max-rtt?             decimal64
```

rpcs:

```
+---x ping-start-test {feature-list:HAVE_HOSTPD}?
| +---w input
|   +---w test-name    string
|   +---w destination  string
|   +---w protocol     ipi-ping-types:ping_ip_protocol_t
|   +---w vrf-name?    string
|   +---w repeat-count? uint32
|   +---w interval?    uint16
|   +---w time-to-live? uint8
|   +---w datagram-size? uint32
|   +---w timeout?     uint32
|   +---w deadline?    uint32
+---x ping-stop {feature-list:HAVE_HOSTPD}?
  +---w input
    +---w test-name  string
```

notifications:

```
+---n ping-test-completed
  +--ro severity?    cml-data-types:cml_notif_severity_t
  +--ro eventClass?  cml-data-types:cml_notif_class_t
  +--ro test-name?   string
```

---

++ro test-status? ipi-ping-types:ping\_test\_status\_t  
++ro destination? string

---

## module: ipi-platform-port

augment /ipi-platform:components/ipi-platform:component:  
++ro port

---

## module: ipi-platform-transceiver-smart-sfp

++rw smart-sfp  
++rw interfaces  
| ++rw interface\* [interface-name]

```

| +--rw interface-name -> ../config/interface-name
| +--rw config
| | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
| | +--rw xcvr-loopback-remote? cmm_xcvr_direction_t
| +--ro state
|   +--ro interface-name? -> /ipi-interface:interfaces/interface/name
|   +--ro xcvr-loopback-remote? cmm_xcvr_direction_t
+--rw components
  +--ro component* [name]
    +--ro name -> ../state/name
    +--ro state
      +--ro name? string

```

rpcs:

```

+---x smart-sfp-xcvr-txdisable-duration {feature-list:HAVE_CMMD}?
| +---w input
|   +---w if-name string
|   +---w xcvr-tx-disable-duration uint16
+---x smart-sfp-xcvr-reset-remote {feature-list:HAVE_CMMD}?
  +---w input
    +---w if-name string

```

---

## module: ipi-platform

```

+--rw components
| +--ro component* [name]
| | +--ro name -> ../state/name
| | +--ro state
| | | +--ro name? string
| | | +--ro type? ipi-platform-types:cmm_component_type_t {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro location? string {feature-list:NOT_HAVE_TIBIT}?

```

---

```

| | | +--ro mfg-name?          string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro mfg-date?          yang:date-and-time {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro description?       string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro hardware-version?   string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro firmware-version?   string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro software-version?   string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro serial-no?          string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro part-no?            string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro removable?          boolean {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro oper-status?        ipi-platform-types:cmm_component_oper_status_t {feature-
list:NOT_HAVE_TIBIT}?
| | | +--ro product-name?       string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro asset-tag?          string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro component-additional-details* string {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro parent?             -> /components/component/state/name {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro empty?              boolean {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro memory {feature-list:NOT_HAVE_TIBIT}?
| | | | +--ro available?        uint64
| | | | +--ro utilized?         uint64
| | | +--ro board-fru {feature-list:NOT_HAVE_TIBIT}?
| | | | +--ro board-name?       string
| | | | +--ro board-serial-no?  string
| | | | +--ro board-mfg-name?   string
| | | | +--ro board-mfg-date?   yang:date-and-time
| | | +--ro temperature
| | | | +--ro instant?           decimal64
| | | | +--ro min?               decimal64
| | | | +--ro max?               decimal64
| | | | +--ro avg?               decimal64
| | | | +--ro interval?         uint32
| | | | +--ro sensor-name?       string
| | | | +--ro sensor-index?      uint8
| | | | +--ro alarm-status?      boolean
| | | | +--ro alarm-threshold?   decimal64
| | | | +--ro alarm-severity?    cml_alarm_severity_t
| | | | +--ro minimum-emergency-temperature? decimal64
| | | | +--ro maximum-emergency-temperature? decimal64

```

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```
| | | +--ro minimum-alert-temperature?    decimal64
| | | +--ro maximum-alert-temperature?    decimal64
| | | +--ro minimum-critical-temperature?  decimal64
| | | +--ro maximum-critical-temperature?  decimal64
| | +--ro bmc-sensor-data-record {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro state
| | | +--ro sensor-name?                  string
| | | +--ro value?                        ipi-platform-types:cmn_bmc_value_t
| | | +--ro units?                        string
| | | +--ro lower-non-recoverable?        decimal64
| | | +--ro lower-non-critical?           decimal64
| | | +--ro lower-critical?               decimal64
| | | +--ro upper-non-critical?           decimal64
| | | +--ro upper-critical?               decimal64
| | | +--ro upper-non-recoverable?        decimal64
| | | +--ro operational-status?           string
| | | +--ro threshold?                    decimal64
| | | +--ro event-type?                    ipi-platform-types:cmn_bmc_event_type_t
| | +--ro subcomponents
| | | +--ro subcomponent* [subcomponent-name]
| | | +--ro subcomponent-name -> ../state/subcomponent-name
| | | +--ro state
| | |   +--ro subcomponent-name? -> /components/component/state/name
| +--ro cpu
| | | +--ro state
| | | +--ro processor-count?              uint32
| | | +--ro cpu-1min-load-percentage?      decimal64
| | | +--ro cpu-5min-load-percentage?      decimal64
| | | +--ro cpu-15min-load-percentage?     decimal64
| | | +--ro cpu-1min-alert-threshold?      uint8
| | | +--ro cpu-1min-critical-threshold?   uint8
| | | +--ro cpu-5min-alert-threshold?      uint8
| | | +--ro cpu-15min-alert-threshold?     uint8
| | | +--ro cpu-utilization?               decimal64
| | | +--ro cpu-utilization-alert?         uint8
| | | +--ro cpu-utilization-critical?      uint8
```

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```

| | +--ro storage
| | | +--ro state
| | | | +--ro serial-number?          string
| | | | +--ro model-number?           string
| | | | +--ro firmware-revision?      string
| | | | +--ro cylinder-count?         uint16
| | | | +--ro head-count?             uint16
| | | | +--ro sector-count?           uint32
| | | | +--ro unformatted-bytes-or-track? uint16
| | | | +--ro unformatted-bytes-or-sector? uint16
| | | | +--ro revision-number?        string
| | | | +--ro total-memory?           uint64
| | | | +--ro used-memory?            uint64
| | | | +--ro free-memory?            uint64
| | | | +--ro usage-critical-threshold? int32
| | | | +--ro usage-alert-threshold?  int32
| | | | +--ro remaining-life?         int32
| | | | +--ro remain-life-critical-threshold? int32
| | | | +--ro remain-life-alert-threshold? int32
| | | | +--ro available-reserved-space? int32
| | | | +--ro available-reserved-space-critical-threshold? int32
| | | | +--ro available-reserved-space-alert-threshold? int32
| | | | +--ro reallocated-sector-count? int32
| | | | +--ro uncorrectable-sector-count? int32
| | | | +--ro manufacturer-id?        string
| | | | +--ro manufacture-date?       string
| | | | +--ro device-type?            string
| | | | +--ro cache-size?             uint64
| | | | +--ro storage-status?         ipi-platform-types:cml_cmm_storage_status_t
| | +--ro hddisk-monitoring
| | | +--ro state
| | | | +--ro interval?              int32
| | | | +--ro read-average?          int32
| | | | +--ro write-average?         int32
| | | | +--ro read-current?          int32
| | | | +--ro write-current?         int32

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```

| | | +--ro read-threshold?  int32
| | | +--ro write-threshold? int32
| | | +--ro mounted-fileSYSTEMS
| | | +--ro mounted-fileSYSTEM* [mount-point]
| | | +--ro mount-point  -> ../state/mount-point
| | | +--ro state
| | | +--ro mount-point?  string
| | | +--ro total?       uint64
| | | +--ro used?        uint64
| | | +--ro free?        uint64
| | | +--ro usage?       uint8
| | +--ro ram
| | | +--ro state
| | | +--ro total-memory?      uint64
| | | +--ro used-memory?      uint64
| | | +--ro available-memory?  uint64
| | | +--ro shared-memory?     uint64
| | | +--ro buffers?          uint64
| | | +--ro total-swap?       uint64
| | | +--ro free-swap?        uint64
| | | +--ro current-process-count?  uint16
| | | +--ro total-high-memory?  uint64
| | | +--ro available-high-memory? uint64
| | | +--ro unit-size?        uint32
| | | +--ro usage-critical-threshold? uint32
| | | +--ro usage-alert-threshold?  uint32
| | +--ro transceiver {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro state
| | | | +--ro port-no?          uint8
| | | | +--ro presence?         ipi-platform-transceiver-types:ddm_cmm_trans_presence_t
| | | | +--ro type?             ipi-platform-transceiver-types:ddm_cmm_trans_type_t
| | | | +--ro channel-count?    int32
| | | | +--ro transceiver-identifier? ipi-platform-transceiver-types:ddm_cmm_trans_identifier_t
| | | | +--ro connector-type?   ipi-platform-transceiver-types:ddm_cmm_trans_connector_type_t
| | | | +--ro ethernet-compliance-code? ipi-platform-transceiver-types:ddm_cmm_trans_eth_compliance_t
| | | | +--ro extended-ethernet-compliance-code? ipi-platform-transceiver-
types:ddm_cmm_trans_ext_eth_compliance_t

```

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```

| | | +-ro sonet-compliance-code?          ipi-platform-transceiver-types:ddm_cmm_trans_sonet_compliance_t
| | | +-ro fiber-channel-link-length?       ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_linklen_t
| | | +-ro fiber-channel-transmission-technology? ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_transmittech_t
| | | +-ro fiber-channel-transmission-media?   ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_transmitmedia_t
| | | +-ro serial-encoding-algorithm?         ipi-platform-transceiver-types:ddm_cmm_trans_encoding_t
| | | +-ro link-length-kilometer?            int32
| | | +-ro link-length-meter?                int32
| | | +-ro om1-link-length?                  int32
| | | +-ro om2-link-length?                  int32
| | | +-ro om3-link-length?                  int32
| | | +-ro om4-link-length?                  int32
| | | +-ro vendor-name?                      string
| | | +-ro vendor-ieee-id?                   string
| | | +-ro vendor-part-number?               string
| | | +-ro vendor-revision-number?            string
| | | +-ro check-code?                       string
| | | +-ro extended-check-code?              string
| | | +-ro nominal-signalling-rate?           int32
| | | +-ro maximum-signalling-rate?           int32
| | | +-ro minimum-signalling-rate?           int32
| | | +-ro vendor-serial-number?              string
| | | +-ro vendor-manufacturing-date?         string
| | | +-ro ddm-type?                          ipi-platform-transceiver-types:ddm_cmm_trans_ddm_support_t
| | | +-ro maximum-case-temperature?          decimal64
| | | +-ro grid-spacing?                      decimal64
| | | +-ro first-frequency?                   decimal64
| | | +-ro last-frequency?                    decimal64
| | | +-ro frequency-error?                   decimal64
| | | +-ro frequency-error-critical-min-threshold? decimal64
| | | +-ro frequency-error-critical-max-threshold? decimal64
| | | +-ro frequency-error-alert-min-threshold? decimal64
| | | +-ro frequency-error-alert-max-threshold? decimal64
| | | +-ro wavelength-error?                  decimal64
| | | +-ro wavelength-error-critical-min-threshold? decimal64

```

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```

| | | +--ro wavelength-error-critical-max-threshold? decimal64
| | | +--ro wavelength-error-alert-min-threshold? decimal64
| | | +--ro wavelength-error-alert-max-threshold? decimal64
| | | +--ro tx-tune-ready? boolean
| | | +--ro thermoelectric-cooler-fault? boolean
| | | +--ro wavelength-locked? boolean
| | | +--ro transceiver-temperature? decimal64
| | | +--ro temperature-alert-max-threshold? decimal64
| | | +--ro temperature-critical-max-threshold? decimal64
| | | +--ro temperature-critical-min-threshold? decimal64
| | | +--ro temperature-alert-min-threshold? decimal64
| | | +--ro transceiver-voltage? decimal64
| | | +--ro voltage-alert-max-threshold? decimal64
| | | +--ro voltage-critical-max-threshold? decimal64
| | | +--ro voltage-critical-min-threshold? decimal64
| | | +--ro voltage-alert-min-threshold? decimal64
| | | +--ro module-functional-type? ipi-platform-transceiver-types:cmm_transceiver_functional_type_t
| | +--ro sfp
| | | +--ro state
| | | +--ro transmit-status? ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | +--ro receive-loss-status? ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | +--ro sfp-identifier? ipi-platform-transceiver-types:ddm_cmm_trans_sfp_extended_identifier_t
| | | +--ro sfp-options-implemented? ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_options_implemented_t
| | | +--ro fiber-channel-sfp-speed? ipi-platform-transceiver-types:ddm_cmm_trans_fiber_channel_speed_t
| | | +--ro sfp-infiniband-compliance-code? ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_infiniband_compliance_t
| | | +--ro sfp-escon-compliance-code? ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_escon_compliance_t
| | | +--ro sfp-plus-cable-technology? ipi-platform-transceiver-types:ddm_cmm_trans_sfp_plus_cable_tech_t
| | +--ro xfp
| | | +--ro state
| | | +--ro transmit-status? ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | +--ro receive-loss-status? ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | +--ro xsfp-identifier? ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_extended_identifier_t
| | | +--ro xfp-10g-ethernet-compliance-code? ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_10g_eth_compliance_t

```

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```

| | | | +--ro xfp-10g-fiber-channel-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_10g_fiber_chn_compliance_t
| | | | +--ro xfp-10g-copper-link-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_10g_copper_links_rsvd_t
| | | | +--ro xfp-lower-speed-link-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_lower_speed_links_t
| | | | +--ro xfp-sonet-interconnect-compliance-code?    ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_sonet_interconnect_t
| | | | +--ro xfp-sonet-short-haul-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_sonet_short_haul_t
| | | | +--ro xfp-sonet-long-haul-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_sonet_long_haul_t
| | | | +--ro xfp-sonet-very-long-haul-compliance-code? ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_sonet_very_long_haul_t
| | | | +--ro xfp-serial-encoding-algorithm?            ipi-platform-transceiver-types:ddm_cmm_trans_xfp_encoding_t
| | | | +--ro xsfp-options-implemented?                ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_options_implemented_t
| | | | +--ro xfp-auxillary-voltage?                    ipi-platform-transceiver-
types:ddm_cmm_trans_xfp_voltage_aux_monitor_t
| | | +--ro qsfp
| | | | +--ro state
| | | | +--ro reset-status?                            ipi-platform-transceiver-types:ddm_cmm_trans_reset_t
| | | | +--ro power?                                    ipi-platform-transceiver-types:ddm_cmm_trans_power_t
| | | | +--ro lane1-transmission?                      ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane1-transmission-loss?                 ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane1-recieve-loss?                     ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane2-transmission?                      ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane2-transmission-loss?                 ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane2-recieve-loss?                     ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane3-transmission?                      ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane3-transmission-loss?                 ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane3-recieve-loss?                     ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane4-transmission?                      ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane4-transmission-loss?                 ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro lane4-recieve-loss?                     ipi-platform-transceiver-types:ddm_tx_rx_state_t
| | | | +--ro qsfp-identifier?                        ipi-platform-transceiver-types:ddm_cmm_qsfp_extended_identfier_t
| | | | +--ro fiber-channel-qsfp-speed?               ipi-platform-transceiver-types:ddm_cmm_trans_fiber_channel_speed_t
| | | | +--ro qsfp-options-implemented?               ipi-platform-transceiver-
types:ddm_cmm_trans_qsfp_options_implemented_t
| | | +--ro channels

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```

| | | +--ro channel* [index]
| | |   +--ro index  -> ../state/index
| | |   +--ro state
| | |     +--ro index?                uint8
| | |     +--ro input-power?          decimal64
| | |     +--ro input-power-alert-max-threshold?    decimal64
| | |     +--ro input-power-critical-max-threshold? decimal64
| | |     +--ro input-power-critical-min-threshold? decimal64
| | |     +--ro input-power-alert-min-threshold?    decimal64
| | |     +--ro output-power?         decimal64
| | |     +--ro output-power-alert-max-threshold?   decimal64
| | |     +--ro output-power-critical-max-threshold? decimal64
| | |     +--ro output-power-critical-min-threshold? decimal64
| | |     +--ro output-power-alert-min-threshold?   decimal64
| | |     +--ro laser-bias-current?      decimal64
| | |     +--ro laser-bias-current-alert-max-threshold? decimal64
| | |     +--ro laser-bias-current-critical-max-threshold? decimal64
| | |     +--ro laser-bias-current-critical-min-threshold? decimal64
| | |     +--ro laser-bias-current-alert-min-threshold? decimal64
| | +--ro cmis-module
| | | +--ro eeprom
| | | | +--ro state
| | | | | +--ro identifier?          ipi-platform-sff8024-types:cmml_sff8024_identifier_t
| | | | | +--ro vendor-name?         string
| | | | | +--ro vendor-oui?          string
| | | | | +--ro part-number?         string
| | | | | +--ro revision-level?      string
| | | | | +--ro serial-number?       string
| | | | | +--ro manufacturing-date?  string
| | | | | +--ro clei-code?           string
| | | | | +--ro module-power-class?  ipi-platform-cmis-types:cmml_cmis_module_power_class_t
| | | | | +--ro module-max-power?    decimal64
| | | | | +--ro cooling-implemented?  ipi-platform-cmis-types:cmml_cmis_yes_no_t
| | | | | +--ro temperature-max?     int16
| | | | | +--ro temperature-min?     int16
| | | | | +--ro operatin-voltage-min? decimal64

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```

| | | | +--ro optical-detector?      ipi-platform-cmis-types:cmm_cmis_optical_detector_t
| | | | +--ro rx-power-measurement?   ipi-platform-cmis-types:cmm_cmis_rx_power_measur_t
| | | | +--ro tx-disable-module-wide? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | +--ro cable-assembly-link-length? int16
| | | | +--ro connector-type?         ipi-platform-sff8024-types:cmm_sff8024_connector_type_t
| | | | +--ro cca-5ghz?               uint8
| | | | +--ro cca-7ghz?               uint8
| | | | +--ro cca-12p9ghz?            uint8
| | | | +--ro cca-25p8ghz?            uint8
| | | | +--ro media-interface-technology? ipi-platform-cmis-types:cmm_cmis_media_intf_tech_t
| | | | +--ro cmis-revision?          string
| | | | +--ro memory-model?           ipi-platform-cmis-types:cmm_cmis_memory_model_t
| | | | +--ro mci-max-speed?          ipi-platform-cmis-types:cmm_cmis_mci_max_speed_t
| | | | +--ro active-firmware-revision? string
| | | | +--ro inactive-firmware-revision? string
| | | | +--ro hardware-revision?      string
| | | | +--ro media-type?             ipi-platform-cmis-types:cmm_cmis_media_type_t
| | | | +--ro max-smf-link-length?    decimal64
| | | | +--ro max-mmfm-om2-link-length? uint8
| | | | +--ro max-mmfm-om3-link-length? uint16
| | | | +--ro max-mmfm-om4-link-length? uint16
| | | | +--ro max-mmfm-om5-link-length? uint16
| | | | +--ro wavelength-nominal?     decimal64
| | | | +--ro wavelength-tolerance?   decimal64
| | | +--ro advertisement
| | | +--ro applications
| | | | +--ro application* [id]
| | | | | +--ro id    -> ../state/id
| | | | | +--ro state
| | | | | | +--ro id?  uint8
| | | | | +--ro host
| | | | | | +--ro state
| | | | | | +--ro interface-type?      ipi-platform-cmis-types:cmm_cmis_interface_type_t
| | | | | | +--ro application-bitrate?  ipi-platform-cmis-types:cmm_cmis_bit_rate_t
| | | | | | +--ro lane-count?           uint8
| | | | | | +--ro signal-bitrate?       ipi-platform-cmis-types:cmm_cmis_bit_rate_t

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```

| | | | | | +--ro modulation-format?      ipi-platform-cmis-types:cm_m_cmis_modulation_format_t
| | | | | | +--ro bits-per-unit-interval? decimal64
| | | | | | +--ro lane-assignment?        ipi-platform-cmis-types:cm_m_cmis_lane_assignment_t
| | | | | | +--ro host-config?            string
| | | | | | +--ro media
| | | | | | +--ro state
| | | | | | +--ro interface-type?        ipi-platform-cmis-types:cm_m_cmis_interface_type_t
| | | | | | +--ro application-bitrate?    ipi-platform-cmis-types:cm_m_cmis_bit_rate_t
| | | | | | +--ro lane-count?            uint8
| | | | | | +--ro signal-bitrate?        ipi-platform-cmis-types:cm_m_cmis_bit_rate_t
| | | | | | +--ro modulation-format?      ipi-platform-cmis-types:cm_m_cmis_modulation_format_t
| | | | | | +--ro bits-per-unit-interval? decimal64
| | | | | | +--ro lane-assignment?        ipi-platform-cmis-types:cm_m_cmis_lane_assignment_t
| | | | | +--ro custom-application
| | | | | +--ro state
| | | | | | +--ro application-selector?    uint8
| | | | | | +--ro host-ids
| | | | | | +--ro host-id* [id]
| | | | | | | +--ro id      -> ../state/id
| | | | | | | +--ro state
| | | | | | | +--ro id?          uint8
| | | | | | | +--ro interface-type?    ipi-platform-cmis-types:cm_m_cmis_interface_type_t
| | | | | | | +--ro application-bitrate? ipi-platform-cmis-types:cm_m_cmis_bit_rate_t
| | | | | | | +--ro lane-count?        uint8
| | | | | | | +--ro signal-bitrate?    ipi-platform-cmis-types:cm_m_cmis_bit_rate_t
| | | | | | | +--ro modulation-format? ipi-platform-cmis-types:cm_m_cmis_modulation_format_t
| | | | | | | +--ro bits-per-unit-interval? decimal64
| | | | | | | +--ro lane-assignment?    ipi-platform-cmis-types:cm_m_cmis_lane_assignment_t
| | | | | | | +--ro host-config?        string
| | | | | | +--ro media-ids
| | | | | | +--ro media-id* [id]
| | | | | | | +--ro id      -> ../state/id
| | | | | | | +--ro state
| | | | | | | +--ro id?          uint8
| | | | | | | +--ro interface-type?    ipi-platform-cmis-types:cm_m_cmis_interface_type_t
| | | | | | | +--ro application-bitrate? ipi-platform-cmis-types:cm_m_cmis_bit_rate_t

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| | | | |    +--ro lane-count?          uint8
| | | | |    +--ro signal-bitrate?      ipi-platform-cmis-types:cmm_cmis_bit_rate_t
| | | | |    +--ro modulation-format?   ipi-platform-cmis-types:cmm_cmis_modulation_format_t
| | | | |    +--ro bits-per-unit-interval? decimal64
| | | | |    +--ro lane-assignment?     ipi-platform-cmis-types:cmm_cmis_lane_assignment_t
| | | | | +--ro controls
| | | | | +--ro state
| | | | |   +--ro wavelength-control?    ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro tunable-transmitter?   ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro tx-output-squelching-method? ipi-platform-cmis-types:cmm_cmis_tx_squelch_method_t
| | | | |   +--ro forced-tx-output-squelching? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro tx-output-squelching-disable? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro tx-output-disable?     ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro input-polarity-flip-tx? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro rx-output-squelching-disable? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro rx-output-disable?     ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro output-polarity-flip-rx? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | | +--ro diagnostics
| | | | | +--ro module
| | | | | +--ro state
| | | | |   +--ro simultaneous-host-and-media-loopback? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro report-bit-error-ratio?      ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro count-bits-and-errors?       ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | | +--ro host
| | | | | +--ro state
| | | | |   +--ro output-loopback?          ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro input-loopback?          ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro per-lane-loopback?        ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro report-input-snr?         ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro report-fec?              ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro prbs-checker-post-fec?    ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro prbs-checker-pre-fec?    ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro prbs-checker-types?      ipi-platform-cmis-types:cmm_cmis_prbs_support_type_t
| | | | |   +--ro prbs-generator-post-fec? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro prbs-generator-pre-fec? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | |   +--ro prbs-generator-types?    ipi-platform-cmis-types:cmm_cmis_prbs_support_type_t

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```

| | | | | +--ro media
| | | | |   +--ro state
| | | | |     +--ro output-loopback?      ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro input-loopback?       ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro per-lane-loopback?     ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro report-input-snr?      ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro report-fec?           ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro prbs-checker-post-fec? ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro prbs-checker-pre-fec?  ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro prbs-checker-types?    ipi-platform-cmis-types:cm_m_cmis_prbs_support_type_t
| | | | |     +--ro prbs-generator-post-fec? ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro prbs-generator-pre-fec? ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro prbs-generator-types?  ipi-platform-cmis-types:cm_m_cmis_prbs_support_type_t
| | | | | +--ro durations
| | | | |   +--ro state
| | | | |     +--ro modsel-wait-time?      uint32
| | | | |     +--ro dpinit-maximun-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro dpdeinit-maximun-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro dptxturnon-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro dptxturnoff-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro modulepwrup-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro modulepwrdown-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro npinit-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro npdeinit-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro nptxturnon-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | |     +--ro nptxturnoff-maximum-duration? ipi-platform-cmis-types:cm_m_cmis_durations_t
| | | | | +--ro laser
| | | | |   +--ro state
| | | | |     +--ro supported-grids?      ipi-platform-cmis-types:cm_m_cmis_laser_grid_support_t
| | | | |     +--ro fine-tune-supported?   ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro fine-tune-resolution?  decimal64
| | | | |     +--ro fine-tune-low-offset?  decimal64
| | | | |     +--ro fine-tune-high-offset? decimal64
| | | | |     +--ro per-lane-programmable-output-power? ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | |     +--ro minimum-programmable-output-power? decimal64
| | | | |     +--ro maximum-programmable-output-power? decimal64

```

```

| | | | | +--ro grids
| | | | |   +--ro grid* [id]
| | | | |     +--ro id    -> ../state/id
| | | | |     +--ro state
| | | | |       +--ro id?          ipi-platform-cmis-types:cmm_cmis_laser_grid_spacing_t
| | | | |       +--ro lowest-channel-frequency?  decimal64
| | | | |       +--ro highest-channel-frequency? decimal64
| | | | |       +--ro channel-count?          uint16
| | | | | +--ro monitoring
| | | | |   +--ro module
| | | | | | +--ro monitors
| | | | | |   +--ro monitor* [id]
| | | | | |     +--ro id    -> ../state/id
| | | | | |     +--ro state
| | | | | |       +--ro id?      ipi-platform-cmis-types:cmm_cmis_module_monitor_id_t
| | | | | |       +--ro supported? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | | | +--ro host
| | | | | |   +--ro monitors
| | | | | | | +--ro monitor* [id]
| | | | | | |   +--ro id    -> ../state/id
| | | | | | |   +--ro state
| | | | | | |     +--ro id?      ipi-platform-cmis-types:cmm_cmis_host_monitor_id_t
| | | | | | |     +--ro supported? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | | | |     +--ro lanes-assigned? ipi-platform-cmis-types:cmm_cmis_lane_assignment_t
| | | | | | +--ro flags
| | | | | |   +--ro flag* [id]
| | | | | |     +--ro id    -> ../state/id
| | | | | |     +--ro state
| | | | | |       +--ro id?      ipi-platform-cmis-types:cmm_cmis_host_flag_id_t
| | | | | |       +--ro supported? ipi-platform-cmis-types:cmm_cmis_yes_no_t
| | | | | |       +--ro lanes-assigned? ipi-platform-cmis-types:cmm_cmis_lane_assignment_t
| | | | | +--ro media
| | | | |   +--ro monitors
| | | | | | +--ro monitor* [id]
| | | | | |   +--ro id    -> ../state/id
| | | | | |   +--ro state

```

```

| | | | | | +--ro id?          ipi-platform-cmis-types:cm_m_cmis_media_monitor_id_t
| | | | | | +--ro supported?    ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | | +--ro lanes-assigned? ipi-platform-cmis-types:cm_m_cmis_lane_assignment_t
| | | | | | +--ro flags
| | | | | | +--ro flag* [id]
| | | | | | +--ro id    -> ../state/id
| | | | | | +--ro state
| | | | | | +--ro id?          ipi-platform-cmis-types:cm_m_cmis_media_flag_id_t
| | | | | | +--ro supported?    ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | | +--ro lanes-assigned? ipi-platform-cmis-types:cm_m_cmis_lane_assignment_t
| | | | | +--ro pages
| | | | | +--ro state
| | | | | +--ro network-path-pages-supported? ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro vdm-pages-supported?          ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro vdm-groups?                   ipi-platform-cmis-types:cm_m_cmis_vdm_pages_support_t
| | | | | +--ro diagnostics-pages-supported? ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro user-page-supported?          ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro banks-per-page?              ipi-platform-cmis-types:cm_m_cmis_bank_per_page_support_t
| | | | | +--ro signal-integrity
| | | | | +--ro state
| | | | | +--ro tx-input-manual-eq?          ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro tx-input-eq-max?            uint8
| | | | | +--ro rx-output-eq-pre-cursor?     ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro rx-output-eq-pre-cursor-max? uint8
| | | | | +--ro rx-output-eq-post-cursor?    ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro rx-output-eq-post-cursor-max? uint8
| | | | | +--ro rx-output-amp?               ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro rx-output-amp-codes?        ipi-platform-cmis-types:cm_m_cmis_si_amp_codes_t
| | | | | +--ro tx-cdr?                      ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro tx-cdr-bypass?              ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro rx-cdr?                     ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | | +--ro rx-cdr-bypass?              ipi-platform-cmis-types:cm_m_cmis_yes_no_t
| | | | +--ro module-state
| | | | +--ro state
| | | | | +--ro fault-state? ipi-platform-cmis-types:cm_m_cmis_module_fault_state_t
| | | | | +--ro current-state? ipi-platform-cmis-types:cm_m_cmis_module_state_t

```

```

| | | | +--ro datapaths
| | | |   +--ro datapath* [lane]
| | | |     +--ro lane    -> ../state/lane
| | | |     +--ro state
| | | |       +--ro lane?      uint8
| | | |       +--ro current-state? ipi-platform-cmis-types:cm_m_cmis_datapath_states_t
| | | |       +--ro host-rate?   decimal64
| | | |       +--ro media-rate?  decimal64
| | | |       +--ro interface-name? string
| | | | +--ro module-monitors
| | | |   +--ro monitors
| | | |     +--ro monitor* [id]
| | | |       +--ro id        -> ../state/id
| | | |       +--ro state
| | | |         +--ro id?      ipi-platform-cmis-types:cm_m_cmis_module_monitor_id_t
| | | |         +--ro description? string
| | | |         +--ro value?    decimal64
| | | |         +--ro high-alarm? decimal64
| | | |         +--ro high-warning? decimal64
| | | |         +--ro low-warning? decimal64
| | | |         +--ro low-alarm? decimal64
| | | |   +--ro monitor-alarm
| | | |     +--ro state
| | | |       +--ro alarm-id?    ipi-platform-cmis-types:cm_m_cmis_module_monitor_id_t
| | | |       +--ro alarm-type?  ipi-platform-cmis-types:cm_m_cmis_threshold_alarm_t
| | | |       +--ro current-value? decimal64
| | | |       +--ro threshold-minimum? decimal64
| | | |       +--ro threshold-maximum? decimal64
| | | | +--ro host-monitors
| | | |   +--ro lanes
| | | |     +--ro lane* [number]
| | | |       +--ro number      -> ../state/number
| | | |       +--ro state
| | | |         | +--ro number?    uint8
| | | |         | +--ro dp-assigned? boolean
| | | |         +--ro monitors

```

```

| | | | | | +--ro monitor* [id]
| | | | | | +--ro id      -> ../state/id
| | | | | | +--ro state
| | | | | | +--ro id?      ipi-platform-cmis-types:cm_mis_host_monitor_id_t
| | | | | | +--ro description? string
| | | | | | +--ro value?    decimal64
| | | | | | +--ro high-alarm? decimal64
| | | | | | +--ro high-warning? decimal64
| | | | | | +--ro low-warning? decimal64
| | | | | | +--ro low-alarm? decimal64
| | | | | | +--ro flags
| | | | | | +--ro flag* [id]
| | | | | | +--ro id      -> ../state/id
| | | | | | +--ro state
| | | | | | +--ro id?      ipi-platform-cmis-types:cm_mis_host_flag_id_t
| | | | | | +--ro description? string
| | | | | | +--ro value?    boolean
| | | | | | +--ro monitor-alarm
| | | | | | +--ro state
| | | | | | +--ro alarm-id? ipi-platform-cmis-types:cm_mis_host_monitor_id_t
| | | | | | +--ro alarm-type? ipi-platform-cmis-types:cm_mis_threshold_alarm_t
| | | | | | +--ro current-value? decimal64
| | | | | | +--ro threshold-minimum? decimal64
| | | | | | +--ro threshold-maximum? decimal64
| | | | | | +--ro flag-alarm
| | | | | | +--ro state
| | | | | | +--ro alarm-id? ipi-platform-cmis-types:cm_mis_host_flag_id_t
| | | | +--ro media-monitors
| | | | +--ro lanes
| | | | +--ro lane* [number]
| | | | +--ro number      -> ../state/number
| | | | +--ro state
| | | | +--ro number?    uint8
| | | | +--ro monitors
| | | | +--ro monitor* [id]
| | | | +--ro id      -> ../state/id

```

```

| | | | | | +--ro state
| | | | | | +--ro id?      ipi-platform-cmis-types:cm_m_cmis_media_monitor_id_t
| | | | | | +--ro description?  string
| | | | | | +--ro value?      decimal64
| | | | | | +--ro high-alarm?  decimal64
| | | | | | +--ro high-warning? decimal64
| | | | | | +--ro low-warning? decimal64
| | | | | | +--ro low-alarm?   decimal64
| | | | | | +--ro flags
| | | | | | | +--ro flag* [id]
| | | | | | | +--ro id      -> ../state/id
| | | | | | | +--ro state
| | | | | | | +--ro id?      ipi-platform-cmis-types:cm_m_cmis_media_flag_id_t
| | | | | | | +--ro description? string
| | | | | | | +--ro value?    boolean
| | | | | | | +--ro monitor-alarm
| | | | | | | +--ro state
| | | | | | | +--ro alarm-id?    ipi-platform-cmis-types:cm_m_cmis_media_monitor_id_t
| | | | | | | +--ro alarm-type?   ipi-platform-cmis-types:cm_m_cmis_threshold_alarm_t
| | | | | | | +--ro current-value? decimal64
| | | | | | | +--ro threshold-minimum? decimal64
| | | | | | | +--ro threshold-maximum? decimal64
| | | | | | | +--ro flag-alarm
| | | | | | | +--ro state
| | | | | | | +--ro alarm-id? ipi-platform-cmis-types:cm_m_cmis_media_flag_id_t
| | | | +--ro user-thresholds
| | | | +--ro host
| | | | | +--ro lanes
| | | | | | +--ro lane* [number]
| | | | | | +--ro number      -> ../state/number
| | | | | | +--ro state
| | | | | | | +--ro number?  uint8
| | | | | | | +--ro thresholds
| | | | | | | +--ro threshold* [id]
| | | | | | | +--ro id      -> ../state/id
| | | | | | | +--ro state

```

```

| | | | |      +--ro id?      ipi-platform-cmis-types:cm_m_ccmis_thres_state_host_id_t
| | | | |      +--ro value?   decimal64
| | | | |      +--ro minimum? decimal64
| | | | |      +--ro maximum? decimal64
| | | | |      +--ro active?  boolean
| | | | | +--ro media
| | | | | +--ro lanes
| | | | | +--ro lane* [number]
| | | | | +--ro number      -> ../state/number
| | | | | +--ro state
| | | | | | +--ro number?  uint8
| | | | | +--ro thresholds
| | | | | +--ro threshold* [id]
| | | | | +--ro id        -> ../state/id
| | | | | +--ro state
| | | | | +--ro id?      ipi-platform-cmis-types:cm_m_ccmis_thres_state_media_id_t
| | | | | +--ro value?   decimal64
| | | | | +--ro minimum? decimal64
| | | | | +--ro maximum? decimal64
| | | | | +--ro active?  boolean
| | | | +--ro signal-integrity
| | | | +--ro host
| | | | +--ro lanes
| | | | +--ro lane* [number]
| | | | +--ro number      -> ../state/number
| | | | +--ro state
| | | | +--ro number?      uint8
| | | | +--ro tx-input-equalizer-target?      uint8
| | | | +--ro rx-output-equalizer-pre-cursor-target?  uint8
| | | | +--ro rx-output-equalizer-post-cursor-target? uint8
| | | | +--ro rx-output-amplitude-target?      uint8
| | | | +--ro tx-cdr-bypass?      boolean
| | | | +--ro rx-cdr-bypass?      boolean
| | | | +--ro laser-status
| | | | +--ro media
| | | | +--ro lanes

```



```

| | | |      +--ro lane* [number]
| | | |      +--ro number   -> ../state/number
| | | |      +--ro state
| | | |      +--ro number?      uint8
| | | |      +--ro laser-frequency?  decimal64
| | | |      +--ro wavelength?    decimal64
| | | +--ro tibat-olt-microplug
| | |   +--ro state
| | | | +--ro interface-name?      -> /ipi-interface:interfaces/interface/name
| | | | +--ro warranty-seal?        ipi-platform-transceiver-tibit-types:trans_tibit_cmm_warranty_seal_t
| | | | +--ro operational-management?  ipi-platform-transceiver-tibit-types:trans_tibit_cmm_oper_mode_t
| | | | +--ro pon-mode?             ipi-platform-transceiver-tibit-types:trans_tibit_cmm_pon_mode_t
| | | | +--ro active-firmware-bank-id?  uint8
| | | | +--ro next-active-firmware-bank-id?  uint8
| | | | +--ro management-vlan-tpid?    string
| | | | +--ro management-vlan-id?      uint16
| | | | +--ro pon-mac-address?         string
| | | | +--ro ethernet-mac-address?    string
| | | | +--ro pon-port-administrative-state? ipi-platform-transceiver-tibit-types:trans_tibit_cmm_pon_status_t
| | | | +--ro pon-port-operational-status? ipi-platform-transceiver-tibit-types:trans_tibit_cmm_pon_status_t
| | | | +--ro pon-link-count?          uint16
| | | +--ro firmware-banks
| | |   +--ro bank* [bank-id]
| | |     +--ro bank-id   -> ../state/bank-id
| | |     +--ro state
| | |       +--ro bank-id?      uint8
| | |       +--ro release-type?  string
| | |       +--ro major-version?  uint8
| | |       +--ro minor-version?  uint8
| | |       +--ro maintenance-version?  uint8
| | |       +--ro suffix-build-tag?  ipi-platform-transceiver-tibit-types:trans_tibit_cmm_string_t
| | |       +--ro suffix-build-number?  uint16
| | |       +--ro build-sha?          ipi-platform-transceiver-tibit-types:trans_tibit_cmm_string_t
| | |       +--ro application-type?  ipi-platform-transceiver-tibit-types:trans_tibit_cmm_application_type_t
| | |       +--ro created-timestamp?  yang:date-and-time
| | |       +--ro updated-timestamp?  yang:date-and-time

```

---

```

| | +--ro power-supply
| | | +--ro state
| | |   +--ro operational-status?      cml_cmm_power_supply_operstatus_t
| | |   +--ro hot-swap-state?          ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro capacity?                decimal64
| | |   +--ro power-consumption?       decimal64
| | |   +--ro input-power?             decimal64
| | |   +--ro input-voltage?           decimal64
| | |   +--ro output-voltage?          decimal64
| | |   +--ro input-current?           decimal64
| | |   +--ro output-current?          decimal64
| | |   +--ro temperature-sensor1?     decimal64
| | |   +--ro temperature-sensor2?     decimal64
| | |   +--ro temperature-sensor3?     decimal64
| | |   +--ro fan1-rpm?                uint32
| | |   +--ro fan2-rpm?                uint32
| | |   +--ro fan3-rpm?                uint32
| | |   +--ro fan4-rpm?                uint32
| | |   +--ro input-power-status?      ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro output-power-status?     ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro supported-parameters?    cml_cmm_psu_pmbus_param_support_t
| | |   +--ro vin-alert-threshold-min? decimal64
| | |   +--ro vin-alert-threshold-max? decimal64
| | |   +--ro vin-critical-threshold-min? decimal64
| | |   +--ro vin-critical-threshold-max? decimal64
| | |   +--ro vout-alert-threshold-min? decimal64
| | |   +--ro vout-alert-threshold-max? decimal64
| | |   +--ro vout-critical-threshold-min? decimal64
| | |   +--ro vout-critical-threshold-max? decimal64
| | |   +--ro pout-alert-threshold-min? decimal64
| | |   +--ro pout-alert-threshold-max? decimal64
| | |   +--ro pout-critical-threshold-min? decimal64
| | |   +--ro pout-critical-threshold-max? decimal64
| | |   +--ro pin-alert-threshold-min? decimal64
| | |   +--ro pin-alert-threshold-max? decimal64
| | |   +--ro pin-critical-threshold-min? decimal64

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			+--ro pin-critical-threshold-max?	decimal64
			+--ro iin-alert-threshold-min?	decimal64
			+--ro iin-alert-threshold-max?	decimal64
			+--ro iin-critical-threshold-min?	decimal64
			+--ro iin-critical-threshold-max?	decimal64
			+--ro iout-alert-threshold-min?	decimal64
			+--ro iout-alert-threshold-max?	decimal64
			+--ro iout-critical-threshold-min?	decimal64
			+--ro iout-critical-threshold-max?	decimal64
			+--ro temp1-alert-threshold-min?	decimal64
			+--ro temp1-alert-threshold-max?	decimal64
			+--ro temp1-critical-threshold-min?	decimal64
			+--ro temp1-critical-threshold-max?	decimal64
			+--ro temp2-alert-threshold-min?	decimal64
			+--ro temp2-alert-threshold-max?	decimal64
			+--ro temp2-critical-threshold-min?	decimal64
			+--ro temp2-critical-threshold-max?	decimal64
			+--ro vin-hw-shut-max-threshold?	decimal64
			+--ro vin-hw-shut-min-threshold?	decimal64
			+--ro vin-hw-resume_max_threshold?	decimal64
			+--ro vin-hw-resume_min_threshold?	decimal64
			+--ro vout-hw-shut-max-threshold?	decimal64
			+--ro vout-hw-shut-min-threshold?	decimal64
			+--ro vout-hw-resume_max_threshold?	decimal64
			+--ro vout-hw-resume_min_threshold?	decimal64
			+--ro pin-hw-shut-max-threshold?	decimal64
			+--ro pin-hw-shut-min-threshold?	decimal64
			+--ro pin-hw-resume_max_threshold?	decimal64
			+--ro pin-hw-resume_min_threshold?	decimal64
			+--ro pout-hw-shut-max-threshold?	decimal64
			+--ro pout-hw-shut-min-threshold?	decimal64
			+--ro pout-hw-resume_max_threshold?	decimal64
			+--ro pout-hw-resume_min_threshold?	decimal64
			+--ro iin-hw-shut-max-threshold?	decimal64
			+--ro iin-hw-shut-min-threshold?	decimal64
			+--ro iin-hw-resume_max_threshold?	decimal64

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```
| | | +--ro iin-hw-resume_min_threshold?  decimal64
| | | +--ro iout-hw-shut-max-threshold?  decimal64
| | | +--ro iout-hw-shut-min-threshold?  decimal64
| | | +--ro iout-hw-resume_max_threshold? decimal64
| | | +--ro iout-hw-resume_min_threshold? decimal64
| | | +--ro temp1-hw-shut-max-threshold?  decimal64
| | | +--ro temp1-hw-shut-min-threshold?  decimal64
| | | +--ro temp1-hw-resume_max_threshold? decimal64
| | | +--ro temp1-hw-resume_min_threshold? decimal64
| | | +--ro temp2-hw-shut-max-threshold?  decimal64
| | | +--ro temp2-hw-shut-min-threshold?  decimal64
| | | +--ro temp2-hw-resume_max_threshold? decimal64
| | | +--ro temp2-hw-resume_min_threshold? decimal64
| | | +--ro temp3-alert-threshold-min?    decimal64
| | | +--ro temp3-alert-threshold-max?    decimal64
| | | +--ro temp3-critical-threshold-min?  decimal64
| | | +--ro temp3-critical-threshold-max?  decimal64
| | | +--ro temp3-hw-shut-max-threshold?  decimal64
| | | +--ro temp3-hw-shut-min-threshold?  decimal64
| | | +--ro temp3-hw-resume_max_threshold? decimal64
| | | +--ro temp3-hw-resume_min_threshold? decimal64
| | +--ro fan
| | | +--ro state
| | | +--ro fan-index?  uint8
| | | +--ro rpm?        uint32
| | | +--ro minimum-rpm? uint32
| | | +--ro maximum-rpm? uint32
| | | +--ro fan-status?  cml_cmm_fan_status_t
| | | +--ro fan-location? cml_cmm_fan_location_t
| | +--ro fan-tray
| | | +--ro state
| | | +--ro tray-number? uint8
| | | +--ro status?      cml_cmm_fan_tray_status_t
| | | +--ro led-color?   cml_cmm_led_color_code_t
| | | +--ro fan-count?   uint32
| | +--ro chassis
```

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```
| | | +--ro state
| | |   +--ro up-time?          yang:timeticks
| | |   +--ro mac-address?      yang:mac-address
| | |   +--ro label-revision?   string
| | |   +--ro country-code?     string
| | |   +--ro fan-tray-count?   uint32
| | |   +--ro power-supplies-count?  uint32
| | |   +--ro chassis-fast-ethernet-count?  uint32
| | |   +--ro chassis-1g-ethernet-count?  uint32
| | |   +--ro chassis-10g-ethernet-count?  uint32
| | |   +--ro chassis-25g-ethernet-count?  uint32
| | |   +--ro chassis-40g-ethernet-count?  uint32
| | |   +--ro chassis-50g-ethernet-count?  uint32
| | |   +--ro chassis-100g-ethernet-count?  uint32
| | |   +--ro chassis-400g-ethernet-count?  uint32
| | |   +--ro service-tag?      string
| | |   +--ro platform-name?    string
| | |   +--ro onie-version?     string
| | |   +--ro vendor-name?      string
| | |   +--ro diagnostic-version?  string
| | |   +--ro cyclic-redundancy-32bit-value? string
| | |   +--ro switch-chip-revision?  string
| | |   +--ro fan-board-id?        string
| | |   +--ro supported-label-revision?  string
| | |   +--ro supported-switch-chip-revision? string
| | |   +--ro system_status?      ipi-platform-types:platform_system_status_type_t
| | |   +--ro cpu_status?         ipi-platform-types:platform_system_status_type_t
| | |   +--ro ram_status?         ipi-platform-types:platform_system_status_type_t
| | |   +--ro storage_status?     ipi-platform-types:platform_system_status_type_t
| | |   +--ro temperature_status? ipi-platform-types:platform_system_status_type_t
| | |   +--ro fan_status?         ipi-platform-types:platform_system_status_type_t
| | |   +--ro psu_status?         ipi-platform-types:platform_system_status_type_t
| | |   +--ro software_status?    ipi-platform-types:platform_system_status_type_t
| | +--ro linecard
| | | +--ro state
| | |   +--ro slot-id?  string
```

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```

| | +--ro power-rail
| | | +--ro state
| | |   +--ro power-vddr-status?          ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-core-status?          ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p1-power-rail?            ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro main-board-power-rail?      ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-5v-power-status?        ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-3v-power-status?        ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-1v-mac-power-status?    ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-1v-mac-avs-power-status? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vccv1p05-power-status?      ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vccv1p5-power-status?       ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vccv1p8-power-status?       ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p05-power-rail?           ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-power-rail?             ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro sbv1p5-power-rail?          ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p0-power-rail?            ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p5-power-rail?            ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v3p3-power-rail?            ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p8-power-rail?            ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p9-power-rail?            ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v1p35-power-rail?           ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-avs-1v-power-status?    ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro ddrvt-power-status?         ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro vcc-mac-v1p25-power-status? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro mac-v1p8-power-status?      ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-1-power-status? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-2-power-status? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-1-power-rail?   ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-2-power-rail?   ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-1-v12-power-rail? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-2-v12-power-rail? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-1-ac-alert-power-rail? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-supply-2-ac-alert-power-rail? ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro power-vccp-status?          ipi-platform-types:cml_cmm_power_rail_t
| | |   +--ro v5a-power-rail?             ipi-platform-types:cml_cmm_power_rail_t

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| | | +--ro v3p3a-power-rail?      ipi-platform-types:cml_cmm_power_rail_t
| | | +--ro hot-swap-1-power-rail?  ipi-platform-types:cml_cmm_power_rail_t
| | | +--ro hot-swap-2-power-rail?  ipi-platform-types:cml_cmm_power_rail_t
| | | +--ro xp0r-v75-power-rail?    ipi-platform-types:cml_cmm_power_rail_t
| | | +--ro xp1r-v07-cp-power-rail? ipi-platform-types:cml_cmm_power_rail_t
| | +--ro ceragon
| | | +--ro cpld-attr
| | | | +--ro state
| | | | +--ro usb-over-current-status? uint8
| | | | +--ro loss-of-input-clock-status? uint8
| | | +--ro poe
| | | | +--ro state
| | | | +--ro port-index? uint8
| | | | +--ro port-name? string
| | | | +--ro port-state? ipi-platform-ceragon-types:cmm_poe_port_status_t
| | +--ro edfas
| | | +--ro edfa* [port]
| | | +--ro port      -> ../state/port
| | | +--ro state
| | | | +--ro port? uint8
| | | +--ro monitors
| | | | +--ro monitor* [id]
| | | | +--ro id      -> ../state/id
| | | | +--ro state
| | | | | +--ro id?      ipi-platform-transceiver-types:cmm_edfa_ddm_monitor_id_t
| | | | | +--ro description? string
| | | | | +--ro value?    decimal64
| | | | | +--ro high-alarm? decimal64
| | | | | +--ro high-warning? decimal64
| | | | | +--ro low-warning? decimal64
| | | | | +--ro low-alarm? decimal64
| | | +--ro monitor-alarm
| | | | +--ro state
| | | | +--ro alarm-id?      ipi-platform-transceiver-types:cmm_edfa_ddm_monitor_id_t
| | | | +--ro alarm-type?    ipi-platform-transceiver-types:cmm_ddm_threshold_alarm_t
| | | | +--ro current-value? decimal64

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```

| | |      +--ro threshold-minimum?  decimal64
| | |      +--ro threshold-maximum?  decimal64
| | +--ro remote-sfps
| |   +--ro remote-sfp* [port]
| |     +--ro port      -> ../state/port
| |     +--ro state
| |       | +--ro port?  uint8
| |       +--ro eeprom
| |       | +--ro state
| |       | +--ro identifier?          ipi-platform-transceiver-types:ddm_cmm_trans_identifier_t
| |       | +--ro sfp-extended-identifier?  ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_extended_identifier_t
| |       | +--ro connector-type?          ipi-platform-transceiver-types:ddm_cmm_trans_connector_type_t
| |       | +--ro ethernet-compliance-code?  ipi-platform-transceiver-
types:ddm_cmm_trans_eth_compliance_t
| |       | +--ro extended-ethernet-compliance-code?  ipi-platform-transceiver-
types:ddm_cmm_trans_ext_eth_compliance_t
| |       | +--ro sonet-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_sonet_compliance_t
| |       | +--ro fiber-channel-link-length?  ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_linklen_t
| |       | +--ro fiber-channel-transmission-technology?  ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_transmittech_t
| |       | +--ro fiber-channel-transmission-media?  ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_transmitmedia_t
| |       | +--ro fiber-channel-sfp-speed?      ipi-platform-transceiver-
types:ddm_cmm_trans_fiber_channel_speed_t
| |       | +--ro sfp-infiniband-compliance-code?  ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_infiniband_compliance_t
| |       | +--ro sfp-escon-compliance-code?      ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_escon_compliance_t
| |       | +--ro sfp-plus-cable-technology?      ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_plus_cable_tech_t
| |       | +--ro serial-encoding-algorithm?      ipi-platform-transceiver-types:ddm_cmm_trans_encoding_t
| |       | +--ro link-length-kilometer?          int32
| |       | +--ro link-length-meter?              int32
| |       | +--ro om1-link-length?                int32
| |       | +--ro om2-link-length?                int32
| |       | +--ro om3-link-length?                int32
| |       | +--ro om4-link-length?                int32

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```

| | | +--ro vendor-name?          string
| | | +--ro vendor-ieee-id?       string
| | | +--ro vendor-part-number?   string
| | | +--ro vendor-revision-number? string
| | | +--ro check-code?           string
| | | +--ro extended-check-code?  string
| | | +--ro nominal-signalling-rate? int32
| | | +--ro maximum-signalling-rate? int32
| | | +--ro minimum-signalling-rate? int32
| | | +--ro vendor-serial-number?  string
| | | +--ro vendor-manufacturing-date? string
| | | +--ro ddm-type?              ipi-platform-transceiver-types:ddm_cmm_trans_ddm_support_t
| | | +--ro maximum-case-temperature? decimal64
| | | +--ro sfp-options-implemented? ipi-platform-transceiver-
types:ddm_cmm_trans_sfp_options_implemented_t
| | +--ro monitors
| | | +--ro monitor* [id]
| | | | +--ro id      -> ../state/id
| | | | +--ro state
| | | | | +--ro id?      ipi-platform-transceiver-types:cmm_smart_sfp_ddm_monitor_id_t
| | | | | +--ro description? string
| | | | | +--ro value?    decimal64
| | | | | +--ro high-alarm? decimal64
| | | | | +--ro high-warning? decimal64
| | | | | +--ro low-warning? decimal64
| | | | | +--ro low-alarm? decimal64
| | | +--ro monitor-alarm
| | | | +--ro state
| | | | | +--ro alarm-id?      ipi-platform-transceiver-types:cmm_smart_sfp_ddm_monitor_id_t
| | | | | +--ro alarm-type?    ipi-platform-transceiver-types:cmm_ddm_threshold_alarm_t
| | | | | +--ro current-value? decimal64
| | | | | +--ro threshold-minimum? decimal64
| | | | | +--ro threshold-maximum? decimal64
| | | +--ro protocol
| | | | +--ro state
| | | | | +--ro protocol-running-state? ipi-platform-transceiver-types:cmm_smart_sfp_protocol_running_state_t
| | | | | +--ro protocol-local-status? ipi-platform-transceiver-types:cmm_smart_sfp_protocol_status_t

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```

| |      | +--ro protocol-remote-status? ipi-platform-transceiver-types:cmm_smart_sfp_protocol_status_t
| |      | +--ro packets-rx?             int32
| |      | +--ro packets-tx?             int32
| |      | +--ro packets-error?          int32
| |      +--ro alarm
| |      +--ro state
| |          +--ro alarm-id?             ipi-platform-transceiver-types:cmm_smart_sfp_protocol_alarm_id_t
| |          +--ro current-status?       ipi-platform-transceiver-types:cmm_smart_sfp_protocol_status_t
| +--rw debug
| | +--rw config
| | | +--rw enable-cmm? empty
| | | +--rw enable-ddm? empty {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro state
| | |   +--ro enable-cmm? empty
| | |   +--ro enable-ddm? empty {feature-list:NOT_HAVE_TIBIT}?
| | |   +--ro terminal-debug-status-cmm? cml-data-types:cml_on_off_t
| | |   +--ro terminal-debug-status-ddm? cml-data-types:cml_on_off_t {feature-list:NOT_HAVE_TIBIT}?
| +--rw global
| | +--rw config
| | | +--rw warning-repeat? empty
| | | +--rw locator-led-enable? empty {feature-list:NOT_HAVE_TIBIT}?
| | | +--rw ddm-monitor-time-interval? uint16 {feature-list:NOT_HAVE_TIBIT}?
| | | +--rw service-unsupported-transceiver? empty {feature-list:NOT_HAVE_TIBIT}?
| | | +--rw enable-ddm-monitor? empty {feature-list:NOT_HAVE_TIBIT}?
| | | +--ro state
| | |   +--ro warning-repeat? empty
| | |   +--ro locator-led-enable? empty {feature-list:NOT_HAVE_TIBIT}?
| | |   +--ro ddm-monitor-time-interval? uint16 {feature-list:NOT_HAVE_TIBIT}?
| | |   +--ro service-unsupported-transceiver? empty {feature-list:NOT_HAVE_TIBIT}?
| | |   +--ro enable-ddm-monitor? empty {feature-list:NOT_HAVE_TIBIT}?
| | +--rw system-load-average-thresholds
| | | +--rw system-load-average-threshold* [system-1min-load-avg-warning-threshold system-1min-load-avg-alarm
system-5min-load-avg-alarm system-15min-load-avg-alarm]
| | |   +--rw system-1min-load-avg-warning-threshold -> ../config/system-1min-load-avg-warning-threshold
| | |   +--rw system-1min-load-avg-alarm             -> ../config/system-1min-load-avg-alarm
| | |   +--rw system-5min-load-avg-alarm             -> ../config/system-5min-load-avg-alarm
| | |   +--rw system-15min-load-avg-alarm            -> ../config/system-15min-load-avg-alarm

```

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```

| | | +--rw config
| | | | +--rw system-1min-load-avg-warning-threshold? uint8
| | | | +--rw system-1min-load-avg-alarm?          uint8
| | | | +--rw system-5min-load-avg-alarm?          uint8
| | | | +--rw system-15min-load-avg-alarm?         uint8
| | | +--ro state
| | |   +--ro system-1min-load-avg-warning-threshold? uint8
| | |   +--ro system-1min-load-avg-alarm?          uint8
| | |   +--ro system-5min-load-avg-alarm?          uint8
| | |   +--ro system-15min-load-avg-alarm?         uint8
| | +--rw cpu-core-usage-thresholds
| |   +--rw cpu-core-usage-threshold* [warning-threshold alarm-threshold]
| |     +--rw warning-threshold  -> ../config/warning-threshold
| |     +--rw alarm-threshold    -> ../config/alarm-threshold
| |   +--rw config
| |     | +--rw warning-threshold? uint8
| |     | +--rw alarm-threshold?  uint8
| |     +--ro state
| |       +--ro warning-threshold? uint8
| |       +--ro alarm-threshold?   uint8
| +--rw interfaces {feature-list:NOT_HAVE_TIBIT}?
| | +--rw interface* [interface-name]
| |   +--rw interface-name  -> ../config/interface-name
| |   +--rw config
| |     | +--rw interface-name?      -> /ipi-interface:interfaces/interface/name
| |     | +--rw monitor-port?        ipi-platform-types:cmm_monitor_state
| |     | +--rw poe-enable?          empty
| |     | +--rw transceiver-code?    ipi-platform-transceiver-types:ddm_transceiver_t
| |     | +--rw wavelength?         ipi-platform-types:cml_wavelength_t
| |     | +--rw tx-disable?          empty
| |     | +--rw edfa-operating-mode? ipi-platform-types:edfa_operating_mode_t
| |     | +--rw edfa-target-output-power? decimal64
| |     | +--rw edfa-target-gain?    decimal64
| |     | +--rw tx-cdr-bypass?       empty
| |     | +--rw rx-cdr-bypass?       empty
| |     +--ro state

```

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```

| |   +--ro interface-name?      -> /ipi-interface:interfaces/interface/name
| |   +--ro monitor-port?       ipi-platform-types:cmm_monitor_state
| |   +--ro poe-enable?         empty
| |   +--ro transceiver-code?    ipi-platform-transceiver-types:ddm_transceiver_t
| |   +--ro wavelength?         ipi-platform-types:cml_wavelength_t
| |   +--ro tx-disable?         empty
| |   +--ro edfa-operating-mode? ipi-platform-types:edfa_operating_mode_t
| |   +--ro edfa-target-output-power? decimal64
| |   +--ro edfa-target-gain?    decimal64
| |   +--ro tx-cdr-bypass?       empty
| |   +--ro rx-cdr-bypass?       empty
| +--rw disk-activity-monitoring
| | +--rw config
| | | +--rw interval?          uint16
| | | +--rw read-threshold?    uint32
| | | +--rw write-threshold?   uint32
| | +--ro state
| | | +--ro interval?          uint16
| | | +--ro read-threshold?    uint32
| | | +--ro write-threshold?   uint32
| +--rw temperature
| | +--rw config
| | | +--rw temperature-policy? ipi-platform-types:cml_temp_policy_t
| | +--ro state
| | | +--ro temperature-policy? ipi-platform-types:cml_temp_policy_t
| +--rw thresholds
| | +--rw threshold* [sensor-id]
| | | +--rw sensor-id    -> ../config/sensor-id
| | | +--rw config
| | | | +--rw sensor-id?  uint8
| | | +--ro state
| | | | +--ro sensor-id?  uint8
| | +--rw severities
| | | +--rw severity* [severity]
| | | | +--rw severity    -> ../config/severity
| | | +--rw config

```

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```

|      | +--rw severity?  ipi-platform-types:cml_temp_threshold_t
|      | +--rw value?    int16
|      +--ro state
|          +--ro severity? ipi-platform-types:cml_temp_threshold_t
|          +--ro value?    int16
+--rw forwarding-profile-route-modes {feature-list:HAVE_BROADCOM}?
| +--rw config {feature-list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE}?
| | +--rw route-mode? ipi-platform-profile-types:platform_forwarding_profile_route_mode_t {feature-
list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE}?
| | +--ro state {feature-list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE}?
| | +--ro route-mode? ipi-platform-profile-types:platform_forwarding_profile_route_mode_t {feature-
list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE}?
+--rw profiles {feature-list:HAVE_BROADCOM}?
| +--rw hardware-profile
| | +--rw config
| | +--ro state
| | +--rw filters
| | | +--rw config
| | | | +--rw egress-ipv6?      cml-data-types:cml_enable_disable_t {feature-list:HAVE_ACL,feature-
list:NOT_HAVE_DUNE}?
| | | | +--rw ingress-ipv6-acl?  cml-data-types:cml_enable_disable_t {feature-list:HAVE_ACL,feature-
list:NOT_HAVE_DUNE}?
| | | | +--rw ingress-ipv4-custom0? cml-data-types:cml_enable_disable_t {feature-list:HAVE_ACL,feature-
list:NOT_HAVE_DUNE}?
| | | | +--rw ingress-arp?      empty {feature-list:HAVE_ACL}?
| | | | +--rw ingress-mirror?    empty {feature-list:HAVE_ADVANCE_MIRROR,feature-
list:HAVE_BROADCOM,feature-list:NOT_HAVE_DUNE}?
| | | | +--rw ingress-bfd?      cml-data-types:cml_enable_disable_t {feature-
list:HAVE_BFD_HW_OFFLOAD,feature-list:NOT_HAVE_CUSTOM1_HW_BFD}?
| | | | +--rw ipsg-ipv6?        empty {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_BROADCOM}?
| | | | +--rw isolation?        cml-data-types:cml_enable_disable_t {feature-list:NOT_HAVE_DUNE}?
| | | +--ro state
| | | | +--ro egress-ipv6?      cml-data-types:cml_enable_disable_t {feature-list:HAVE_ACL,feature-
list:NOT_HAVE_DUNE}?
| | | | +--ro ingress-ipv6-acl?  cml-data-types:cml_enable_disable_t {feature-list:HAVE_ACL,feature-
list:NOT_HAVE_DUNE}?
| | | | +--ro ingress-ipv4-custom0? cml-data-types:cml_enable_disable_t {feature-list:HAVE_ACL,feature-
list:NOT_HAVE_DUNE}?
| | | | +--ro ingress-arp?      empty {feature-list:HAVE_ACL}?

```

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```

| | | +-ro ingress-mirror?      empty {feature-list:HAVE_ADVANCE_MIRROR,feature-
list:HAVE_BROADCOM,feature-list:NOT_HAVE_DUNE}?
| | | +-ro ingress-bfd?         cml-data-types:cml_enable_disable_t {feature-
list:HAVE_BFD_HW_OFFLOAD,feature-list:NOT_HAVE_CUSTOM1_HW_BFD}?
| | | +-ro ipsg-ipv6?           empty {feature-list:HAVE_DHCP_SNOOP,feature-list:HAVE_BROADCOM}?
| | | +-ro isolation?           cml-data-types:cml_enable_disable_t {feature-list:NOT_HAVE_DUNE}?
| | | +-ro tcam-utilization {feature-list:HAVE_ACL}?
| | | +-ro state
| | | | +-ro warning-threshold-level?    int32
| | | | +-ro critical-alert-threshold-level? int32
| | | +-ro filter-groups
| | | | +-ro filter-group* [group-id]
| | | | +-ro group-id -> ../state/group-id
| | | | +-ro state
| | | | +-ro group-id?      uint32
| | | | +-ro group-name?    cml-data-types:cml_line_t
| | | | +-ro free-entries?   int32
| | | | +-ro used-entries?   int32
| | | | +-ro used-percentage? int32
| | | | +-ro total-entries?  int32
| | | | +-ro dedicated-entries? int32
| | | | +-ro shared-entries? int32
| | +-rw filter-evpn-mpls-mh
| | +-rw config
| | +-ro state
| | +-ro tcam-utilization {feature-list:HAVE_ACL}?
| | +-ro state
| | | +-ro warning-threshold-level?    int32
| | | +-ro critical-alert-threshold-level? int32
| | +-ro filter-groups
| | | +-ro filter-group* [group-id]
| | | +-ro group-id -> ../state/group-id
| | | +-ro state
| | | +-ro group-id?      uint32
| | | +-ro group-name?    cml-data-types:cml_line_t
| | | +-ro free-entries?   int32
| | | +-ro used-entries?   int32

```

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```

| | |      +--ro used-percentage?   int32
| | |      +--ro total-entries?     int32
| | |      +--ro dedicated-entries? int32
| | |      +--ro shared-entries?    int32
| | +--rw statistics
| |   +--rw config
| |   +--ro state
| +--rw forwarding-profiles
|   +--rw config {feature-list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE}?
|   | +--rw profile? ipi-platform-profile-types:platform_forwarding_profile_t {feature-list:HAVE_BCM_UFT,feature-
list:NOT_HAVE_DUNE}?
|   |   +--ro state {feature-list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE}?
|   |   +--ro profile? ipi-platform-profile-types:platform_forwarding_profile_t {feature-list:HAVE_BCM_UFT,feature-
list:NOT_HAVE_DUNE}?
|   |   +--ro table-limit {feature-list:HAVE_BCM_UFT}?
|   |   +--ro state {feature-list:HAVE_BCM_UFT}?
|   |   | +--ro forwarding-profile? ipi-platform-profile-types:platform_forwarding_profile_t {feature-
list:NOT_HAVE_DUNE}?
|   |   | +--ro table-sizes {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_MARVELL,feature-
list:NOT_HAVE_MARVELL}?
|   |   |   +--ro table-size* [profile]
|   |   |   +--ro profile  -> ../state/profile
|   |   |   +--ro state
|   |   |   +--ro profile?          ipi-platform-profile-types:platform_forwarding_profile_t
|   |   |   +--ro mac-address-entries?   uint32
|   |   |   +--ro host-ipv4-entries?     uint32
|   |   |   +--ro host-ipv6-entries?     uint32
|   |   |   +--ro prefix-ipv4-entries?   uint32
|   |   |   +--ro prefix-ipv6-entries?   uint32
|   |   |   +--ro prefix-ipv6-128-entries? uint32 {feature-list:NOT_HAVE_HELIX4}?
|   |   +--rw custom-profile {feature-list:HAVE_BCM_UFT,feature-list:NOT_HAVE_DUNE,feature-
list:NOT_HAVE_MARVELL,feature-list:NOT_HAVE_MARVELL}?
|   |     +--rw config
|   |       | +--rw l2-banks?          uint8
|   |       | +--rw l3-banks?          uint8
|   |       | +--rw lpm-banks?         ipi-platform-profile-types:platform_lpm_custom_profile_t
|   |       | +--rw vlan-xlate-banks?  uint8
|   |       | +--rw ep-vlan-xlate-banks? uint8

```

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```

|   +--ro state
|   +--ro l2-banks?      uint8
|   +--ro l3-banks?      uint8
|   +--ro lpm-banks?     ipi-platform-profile-types:platform_lpm_custom_profile_t
|   +--ro vlan-xlate-banks?  uint8
|   +--ro ep-vlan-xlate-banks? uint8
+--rw hardware {feature-list:HAVE_BROADCOM}?
| +--rw hw-soc-property
| | +--rw config
| | +--ro state
| +--rw load-balance {feature-list:HAVE_BROADCOM}?
| | +--rw config!
| | | +--rw mpls-ip-payload?  empty {feature-list:NOT_HAVE_DUNE}?
| | | +--rw hash?            ipi-platform-profile-types:platform_load_hash_t {feature-list:NOT_HAVE_DUNE}?
| | | +--rw macro-flow-based? empty {feature-list:NOT_HAVE_DUNE}?
| | | +--rw enable           empty
| | | +--rw mpls-label-based? empty
| | +--ro state
| | | +--ro mpls-ip-payload?  empty {feature-list:NOT_HAVE_DUNE}?
| | | +--ro hash?            ipi-platform-profile-types:platform_load_hash_t {feature-list:NOT_HAVE_DUNE}?
| | | +--ro macro-flow-based? empty {feature-list:NOT_HAVE_DUNE}?
| | | +--ro enable           empty
| | | +--ro mpls-label-based? empty
| +--rw l2 {feature-list:HAVE_L2}?
| | +--rw config
| | | +--rw dest-mac-based?  empty {feature-list:NOT_HAVE_DNX}?
| | | +--rw src-mac-based?   empty {feature-list:NOT_HAVE_DNX}?
| | | +--rw ether-type-based? empty
| | | +--rw vlan-based?      empty
| | +--ro state
| | | +--ro dest-mac-based?  empty {feature-list:NOT_HAVE_DNX}?
| | | +--ro src-mac-based?   empty {feature-list:NOT_HAVE_DNX}?
| | | +--ro ether-type-based? empty
| | | +--ro vlan-based?      empty
| +--rw ipv4 {feature-list:HAVE_L3}?
| | +--rw config

```

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---

```

| | | +--rw symmetric?          empty {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_DNX}?
| | | +--rw src-ipv4-address-based?  empty {feature-list:NOT_HAVE_DNX}?
| | | +--rw dest-ipv4-address-based? empty {feature-list:NOT_HAVE_DNX}?
| | | +--rw src-l4-port-based?      empty {feature-list:NOT_HAVE_DNX}?
| | | +--rw dest-l4-port-based?     empty {feature-list:NOT_HAVE_DNX}?
| | | +--rw protocol-id-based?      empty
| | | +--ro state
| | |   +--ro symmetric?          empty {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_DNX}?
| | |   +--ro src-ipv4-address-based?  empty {feature-list:NOT_HAVE_DNX}?
| | |   +--ro dest-ipv4-address-based? empty {feature-list:NOT_HAVE_DNX}?
| | |   +--ro src-l4-port-based?      empty {feature-list:NOT_HAVE_DNX}?
| | |   +--ro dest-l4-port-based?     empty {feature-list:NOT_HAVE_DNX}?
| | |   +--ro protocol-id-based?      empty
| | +--rw ipv6 {feature-list:HAVE_L3}?
| | | +--rw config
| | | | +--rw symmetric?          empty {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_DNX}?
| | | | +--rw src-ipv6-address-based?  empty {feature-list:NOT_HAVE_DNX}?
| | | | +--rw dest-ipv6-address-based? empty {feature-list:NOT_HAVE_DNX}?
| | | | +--rw src-l4-port-based?      empty {feature-list:NOT_HAVE_DNX}?
| | | | +--rw dest-l4-port-based?     empty {feature-list:NOT_HAVE_DNX}?
| | | | +--rw next-header-based?      empty
| | | +--ro state
| | | | +--ro symmetric?          empty {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_DNX}?
| | | | +--ro src-ipv6-address-based?  empty {feature-list:NOT_HAVE_DNX}?
| | | | +--ro dest-ipv6-address-based? empty {feature-list:NOT_HAVE_DNX}?
| | | | +--ro src-l4-port-based?      empty {feature-list:NOT_HAVE_DNX}?
| | | | +--ro dest-l4-port-based?     empty {feature-list:NOT_HAVE_DNX}?
| | | | +--ro next-header-based?      empty
| | +--rw tunnel {feature-list:HAVE_L3,feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_MARVELL,feature-
list:NOT_HAVE_MARVELL}?
| | | +--rw config
| | | | +--rw outer-l3-header?  empty
| | | +--ro state
| | | | +--ro outer-l3-header?  empty
| | +--rw vxlan {feature-list:HAVE_VXLAN,feature-list:NOT_HAVE_DUNE,feature-
list:NOT_HAVE_MARVELL,feature-list:NOT_HAVE_MARVELL}?
| | | +--rw inner-l2

```

---

```

| | | +--rw config
| | | | +--rw dest-mac-based? empty
| | | | +--rw src-mac-based? empty
| | | +--ro state
| | |   +--ro dest-mac-based? empty
| | |   +--ro src-mac-based? empty
| | | +--rw inner-l3
| | |   +--rw config
| | |     +--rw src-ip-based? empty
| | |     +--rw dest-ip-based? empty
| | |     +--rw src-l4-port-based? empty
| | |     +--rw dest-l4-port-based? empty
| | |     +--rw protocol-id-based? empty
| | |   +--ro state
| | |     +--ro src-ip-based? empty
| | |     +--ro dest-ip-based? empty
| | |     +--ro src-l4-port-based? empty
| | |     +--ro dest-l4-port-based? empty
| | |     +--ro protocol-id-based? empty
| | | +--rw mpls-ler {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_MARVELL,feature-
list:NOT_HAVE_MARVELL}?
| | | +--rw inner-l2
| | | | +--rw config
| | | | | +--rw dest-mac-based? empty
| | | | | +--rw src-mac-based? empty
| | | | | +--rw ether-type-based? empty
| | | | | +--rw vlan-based? empty
| | | | +--ro state
| | | |   +--ro dest-mac-based? empty
| | | |   +--ro src-mac-based? empty
| | | |   +--ro ether-type-based? empty
| | | |   +--ro vlan-based? empty
| | | +--rw inner-l3
| | |   +--rw config
| | |     +--rw src-ip-address-based? empty
| | |     +--rw dest-ip-address-based? empty
| | |     +--rw src-l4-port-based? empty

```

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```

| | | | +--rw dest-l4-port-based?    empty
| | | | +--rw protocol-id-based?    empty
| | | | +--ro state
| | | |   +--ro src-ip-address-based? empty
| | | |   +--ro dest-ip-address-based? empty
| | | |   +--ro src-l4-port-based?    empty
| | | |   +--ro dest-l4-port-based?    empty
| | | |   +--ro protocol-id-based?    empty
| | +--rw port-channel {feature-list:NOT_HAVE_MARVELL,feature-list:NOT_HAVE_MARVELL}?
| |   +--rw interfaces {feature-list:HAVE_LACP,feature-list:NOT_HAVE_DUNE}?
| |     +--rw interface* [name]
| |       +--rw name      -> ../config/name
| |       +--rw config
| |         | +--rw name?   -> /ipi-interface:interfaces/interface/name
| |         | +--rw type?   ipi-platform-profile-types:platform_lacp_psc_t
| |         +--ro state
| |           +--ro name?   -> /ipi-interface:interfaces/interface/name
| |           +--ro type?   ipi-platform-profile-types:platform_lacp_psc_t
| | +--ro dram-tune {feature-list:HAVE_BROADCOM}?
| |   +--ro state
| |     +--ro dram-tune-status? int32 {feature-list:HAVE_BROADCOM}?
| | +--rw cpu-queue {feature-list:HAVE_BROADCOM_OR_HAVE_MARVELL}?
| |   +--rw rate-limits
| |     +--rw rate-limit* [queue-name]
| |       +--rw queue-name  -> ../config/queue-name
| |       +--rw config
| |         | +--rw lossy?    ipi-platform-profile-types:platform_cpu_queue_lossy_t {feature-list:NOT_HAVE_DUNE}?
| |         | +--rw monitor?  ipi-platform-profile-types:platform_cpu_queue_monitor_t {feature-list:NOT_HAVE_DUNE}?
| |         | +--rw queue-name? ipi-platform-profile-types:platform_cpu_queue_name_t
| |         | +--rw rate?     int32
| |         +--ro state
| |           +--ro lossy?    ipi-platform-profile-types:platform_cpu_queue_lossy_t {feature-list:NOT_HAVE_DUNE}?
| |           +--ro monitor?  ipi-platform-profile-types:platform_cpu_queue_monitor_t {feature-list:NOT_HAVE_DUNE}?
| |           +--ro queue-name? ipi-platform-profile-types:platform_cpu_queue_name_t
| |           +--ro rate?     int32
| | +--rw mac-ageing {feature-list:NOT_HAVE_MARVELL,feature-list:NOT_HAVE_MARVELL}?

```

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```

| | +--rw config
| | | +--rw enable-mac-ageing-timer?  empty {feature-list:HAVE_L2_AGE_SHOW}?
| | +--ro state
| |   +--ro enable-mac-ageing-timer?  empty {feature-list:HAVE_L2_AGE_SHOW}?
| +--rw platform {feature-list:NOT_HAVE_MARVELL,feature-list:NOT_HAVE_MARVELL}?
| | +--rw config
| |   +--rw soc?  ipi-platform-profile-types:platform_soc_type_t
| +--rw cpu-control {feature-list:HAVE_VXLAN,feature-list:NOT_HAVE_DUNE,feature-
list:NOT_HAVE_MARVELL,feature-list:NOT_HAVE_MARVELL}?
|   +--rw packets
|     +--rw config
|       | +--rw disable-vxlan?  empty
|       +--ro state
|         +--ro disable-vxlan?  empty
+--rw qsf-p-dds
+--rw qsf-p-dd* [fp-port]
+--rw fp-port      -> ../config/fp-port
+--rw config
| +--rw fp-port?      uint8
| +--rw application?  uint8
| +--rw service-disable?  empty
| +--rw custom-app-host-id?  uint8
| +--rw custom-app-media-id? uint8
+--ro state
| +--ro fp-port?      uint8
| +--ro application?  uint8
| +--ro service-disable?  empty
| +--ro custom-app-host-id?  uint8
| +--ro custom-app-media-id? uint8
+--rw host
| +--rw prbs
| | +--rw generator
| | | +--rw config
| | | | +--rw type?      ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | | | +--rw location?  ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| | | +--ro state
| | |   +--ro type?      ipi-platform-cmis-types:cmm_cmis_prbs_type_t

```

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---

```

| | | +--ro location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| | +--rw checker
| | +--rw config
| | | +--rw type? ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | | +--rw location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| | +--ro state
| | +--ro type? ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | +--ro location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| +--rw loopback
| | +--rw config
| | | +--rw type? ipi-platform-cmis-types:cmm_cmis_loopback_type_t
| | +--ro state
| | +--ro type? ipi-platform-cmis-types:cmm_cmis_loopback_type_t
| +--rw lanes
| | +--rw lane* [lane-number]
| | +--rw lane-number -> ../config/lane-number
| | +--rw config
| | | +--rw lane-number? uint8
| | +--ro state
| | | +--ro lane-number? uint8
| | +--rw thresholds
| | | +--rw threshold* [id]
| | | +--rw id -> ../config/id
| | | +--rw config
| | | | +--rw id? ipi-platform-cmis-types:cmm_ccmis_host_lane_thres_id_t
| | | | +--rw high-alarm? decimal64
| | | | +--rw low-alarm? decimal64
| | | | +--rw high-warning? decimal64
| | | | +--rw low-warning? decimal64
| | | +--ro state
| | | +--ro id? ipi-platform-cmis-types:cmm_ccmis_host_lane_thres_id_t
| | | +--ro high-alarm? decimal64
| | | +--ro low-alarm? decimal64
| | | +--ro high-warning? decimal64
| | | +--ro low-warning? decimal64
| | +--rw signal-integrity

```

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---

```

|   +--rw config
|   |   +--rw tx-input-equalizer-target?      uint8
|   |   +--rw rx-output-equalizer-pre-cursor-target?  uint8
|   |   +--rw rx-output-equalizer-post-cursor-target? uint8
|   |   +--rw rx-output-amplitude-target?      uint8
|   |   +--rw tx-cdr-bypass?                   empty
|   |   +--rw rx-cdr-bypass?                   empty
|   +--ro state
|   |   +--ro tx-input-equalizer-target?      uint8
|   |   +--ro rx-output-equalizer-pre-cursor-target?  uint8
|   |   +--ro rx-output-equalizer-post-cursor-target? uint8
|   |   +--ro rx-output-amplitude-target?      uint8
|   |   +--ro tx-cdr-bypass?                   empty
|   |   +--ro rx-cdr-bypass?                   empty
+--rw media
| +--rw prbs
| | +--rw generator
| | | +--rw config
| | | | +--rw type?    ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | | | +--rw location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| | | +--ro state
| | | | +--ro type?    ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | | | +--ro location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| | +--rw checker
| | | +--rw config
| | | | +--rw type?    ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | | | +--rw location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| | | +--ro state
| | | | +--ro type?    ipi-platform-cmis-types:cmm_cmis_prbs_type_t
| | | | +--ro location? ipi-platform-cmis-types:cmm_cmis_prbs_location_t
| +--rw loopback
| | +--rw config
| | | +--rw type?    ipi-platform-cmis-types:cmm_cmis_loopback_type_t
| | +--ro state
| | | +--ro type?    ipi-platform-cmis-types:cmm_cmis_loopback_type_t
| +--rw lanes

```

---

```
|  +--rw lane* [lane-number]
|    +--rw lane-number  -> ../config/lane-number
|    +--rw config
|      | +--rw lane-number?  uint8
|      +--ro state
|        | +--ro lane-number?  uint8
|      +--rw laser
|        | +--rw config
|          | | +--rw channel?      int16
|          | | +--rw grid?        ipi-platform-cmis-types:cmm_cmis_laser_grid_spacing_t
|          | | +--rw fine-tune-freq?  decimal64
|          | | +--rw output-power?  decimal64
|          | +--ro state
|            | +--ro channel?      int16
|            | +--ro grid?        ipi-platform-cmis-types:cmm_cmis_laser_grid_spacing_t
|            | +--ro fine-tune-freq?  decimal64
|            | +--ro output-power?  decimal64
|          +--rw thresholds
|            +--rw threshold* [id]
|              +--rw id      -> ../config/id
|              +--rw config
|                | +--rw id?        ipi-platform-cmis-types:cmm_ccmis_media_lane_thres_id_t
|                | +--rw high-alarm?  decimal64
|                | +--rw low-alarm?   decimal64
|                | +--rw high-warning? decimal64
|                | +--rw low-warning? decimal64
|                +--ro state
|                  +--ro id?        ipi-platform-cmis-types:cmm_ccmis_media_lane_thres_id_t
|                  +--ro high-alarm?  decimal64
|                  +--ro low-alarm?   decimal64
|                  +--ro high-warning? decimal64
|                  +--ro low-warning? decimal64
+--rw laser
| +--rw config
| | +--rw channel?      int16
| | +--rw grid?        ipi-platform-cmis-types:cmm_cmis_laser_grid_spacing_t
```

---

```

| | +--rw fine-tune-freq?  decimal64
| | +--rw output-power?   decimal64
| +--ro state
|   +--ro channel?        int16
|   +--ro grid?           ipi-platform-cmis-types:cmmlaser_grid_spacing_t
|   +--ro fine-tune-freq?  decimal64
|   +--ro output-power?   decimal64
+--rw thresholds
| +--rw threshold* [id]
|   +--rw id      -> ../config/id
|   +--rw config
|     | +--rw id?          ipi-platform-cmis-types:cmmlccmis_thres_id_t
|     | +--rw high-alarm?  decimal64
|     | +--rw low-alarm?   decimal64
|     | +--rw high-warning? decimal64
|     | +--rw low-warning? decimal64
|     +--ro state
|       +--ro id?          ipi-platform-cmis-types:cmmlccmis_thres_id_t
|       +--ro high-alarm?  decimal64
|       +--ro low-alarm?   decimal64
|       +--ro high-warning? decimal64
|       +--ro low-warning? decimal64
+--rw signal-integrity
  +--rw config
    | +--rw tx-input-equalizer-target?      uint8
    | +--rw rx-output-equalizer-pre-cursor-target?  uint8
    | +--rw rx-output-equalizer-post-cursor-target? uint8
    | +--rw rx-output-amplitude-target?        uint8
    | +--rw tx-cdr-bypass?                     empty
    | +--rw rx-cdr-bypass?                     empty
  +--ro state
    +--ro tx-input-equalizer-target?      uint8
    +--ro rx-output-equalizer-pre-cursor-target?  uint8
    +--ro rx-output-equalizer-post-cursor-target? uint8
    +--ro rx-output-amplitude-target?        uint8
    +--ro tx-cdr-bypass?                     empty

```

---



---

+--ro rx-cdr-bypass?                      empty

rpcs:

```
+---x tibit-olt-microplug-set-management-vlan-tpid {feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w interface-name  string
|   +---w vlan-tpid       ipi-platform-transceiver-tibit-types:trans_tibit_cmm_tpid_t
+---x tibit-olt-microplug-set-management-vlan-id {feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w interface-name  string
|   +---w vlan-id         uint16
+---x tibit-olt-microplug-set-ethernet-mac-address {feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w interface-name  string
|   +---w mac-address     yang:mac-address
+---x tibit-olt-microplug-set-next-active-firmware-bank {feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w interface-name  string
|   +---w bank-id         uint8
+---x tibit-olt-microplug-reboot {feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w interface-name  string
+---x ddm-clear-transceiver-alarm-all {feature-list:NOT_HAVE_TIBIT}?
+---x ddm-clear-transceiver-alarm {feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w name            string
+---x cmm-terminal-debug-ddm-on {feature-list:NOT_HAVE_TIBIT}?
+---x cmm-terminal-debug-ddm-off {feature-list:NOT_HAVE_TIBIT}?
+---x cmm-terminal-debug-cmm-on {feature-list:HAVE_CMMD}?
+---x cmm-terminal-debug-cmm-off {feature-list:HAVE_CMMD}?
```

notifications:

```
+---n bmc-lower-non-critical-low-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
```

---

```
| +--ro lower-non-critical?  decimal64
| +--ro threshold?          decimal64
| +--ro units?              string
| +--ro event-type?         ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-lower-non-critical-high-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro lower-non-critical?  decimal64
| +--ro threshold?          decimal64
| +--ro units?              string
| +--ro event-type?         ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-lower-critical-low-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro lower-critical?     decimal64
| +--ro threshold?          decimal64
| +--ro units?              string
| +--ro event-type?         ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-lower-critical-high-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro lower-critical?     decimal64
| +--ro threshold?          decimal64
| +--ro units?              string
| +--ro event-type?         ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-lower-non-recoverable-low-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro lower-non-recoverable? decimal64
| +--ro threshold?          decimal64
| +--ro units?              string
| +--ro event-type?         ipi-platform-types:cmm_bmc_event_type_t
```

---

---

```

+---n bmc-lower-non-recoverable-high-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro lower-non-recoverable? decimal64
| +--ro threshold?         decimal64
| +--ro units?             string
| +--ro event-type?        ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-upper-non-critical-low-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro upper-non-critical? decimal64
| +--ro threshold?         decimal64
| +--ro units?             string
| +--ro event-type?        ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-upper-non-critical-high-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro upper-non-critical? decimal64
| +--ro threshold?         decimal64
| +--ro units?             string
| +--ro event-type?        ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-upper-critical-low-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro upper-critical?    decimal64
| +--ro threshold?         decimal64
| +--ro units?             string
| +--ro event-type?        ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-upper-critical-high-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string

```

---

---

```

| +--ro upper-critical? decimal64
| +--ro threshold?      decimal64
| +--ro units?          string
| +--ro event-type?     ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-upper-non-recoverable-low-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?           string
| +--ro upper-non-recoverable? decimal64
| +--ro threshold?      decimal64
| +--ro units?          string
| +--ro event-type?     ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-upper-non-recoverable-high-threshold-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?           string
| +--ro upper-non-recoverable? decimal64
| +--ro threshold?      decimal64
| +--ro units?          string
| +--ro event-type?     ipi-platform-types:cmm_bmc_event_type_t
+---n bmc-device-state-notification {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?           string
| +--ro operational-status? string
+---n cpu-load-15min-alert
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?           string
| +--ro cpu-15min-load-percentage? decimal64
| +--ro cpu-15min-alert-threshold? uint8
+---n cpu-load-15min-alert-recovery
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?           string
| +--ro cpu-15min-load-percentage? decimal64

```

---

---

```
| +--ro cpu-15min-alert-threshold? uint8
+---n cpu-load-5min-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro cpu-5min-load-percentage? decimal64
| +--ro cpu-5min-alert-threshold? uint8
+---n cpu-load-5min-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro cpu-5min-load-percentage? decimal64
| +--ro cpu-5min-alert-threshold? uint8
+---n cpu-load-1min-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro cpu-1min-load-percentage? decimal64
| +--ro cpu-1min-critical-threshold? uint8
+---n cpu-load-1min-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro cpu-1min-load-percentage? decimal64
| +--ro cpu-1min-critical-threshold? uint8
+---n cpu-load-1min-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro cpu-1min-load-percentage? decimal64
| +--ro cpu-1min-alert-threshold? uint8
+---n cpu-load-1min-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro cpu-1min-load-percentage? decimal64
```

---

---

```
| +--ro cpu-1min-alert-threshold? uint8
+---n storage-usage-rising-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro used-memory?       uint64
| +--ro usage-alert-threshold? int32
| +--ro mount-point?       string
+---n storage-usage-critical-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro used-memory?       uint64
| +--ro usage-critical-threshold? int32
| +--ro mount-point?       string
+---n storage-usage-recovery-from-alert-level
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro used-memory?       uint64
| +--ro usage-alert-threshold? int32
| +--ro mount-point?       string
+---n storage-usage-recovery-from-critical-level
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro used-memory?       uint64
| +--ro usage-critical-threshold? int32
| +--ro mount-point?       string
+---n storage-remaining-life-rising-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro remaining-life?     int32
| +--ro remain-life-alert-threshold? int32
+---n storage-remaining-life-rising-critical
```

---

---

```

| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro remaining-life?     int32
| +--ro remain-life-critical-threshold? int32
+---n storage-available-reserved-space-rising-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro available-reserved-space? int32
| +--ro available-reserved-space-alert-threshold? int32
+---n storage-available-reserved-space-rising-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro available-reserved-space? int32
| +--ro available-reserved-space-critical-threshold? int32
+---n storage-reallocated-sector-count-rising-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro reallocated-sector-count? int32
+---n storage-uncorrectable-sector-count-rising-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro uncorrectable-sector-count? int32
+---n storage-harddisk-monitoring-read-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro read-average?      int32
| +--ro read-threshold?    int32
+---n storage-harddisk-recovery-from-read-alert-level
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t

```

---

---

```
| +--ro name?          string
| +--ro read-average?   int32
| +--ro read-threshold? int32
+---n storage-harddisk-monitoring-write-alert
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro write-average?   int32
| +--ro write-threshold? int32
+---n storage-harddisk-recovery-from-write-alert-level
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro write-average?   int32
| +--ro write-threshold? int32
+---n storage-storage-status-alert
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro storage-status? ipi-platform-types:cml_cmm_storage_status_t
+---n storage-storage-status-critical
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro storage-status? ipi-platform-types:cml_cmm_storage_status_t
+---n ram-usage-rising-critical
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro used-memory?     uint64
| +--ro usage-critical-threshold? uint32
+---n ram-usage-rising-alert
| +--ro severity?       cml-data-types:cml_notif_severity_t
| +--ro eventClass?     cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro used-memory?     uint64
```



---

```

| +--ro usage-alert-threshold? uint32
+---n ram-usage-recovery-from-critical-level
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro used-memory?        uint64
| +--ro usage-critical-threshold? uint32
+---n ram-usage-recovery-from-alert-level
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro used-memory?        uint64
| +--ro usage-alert-threshold? uint32
+---n transceiver-inserted {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro port-no?           uint8
| +--ro type?              ipi-platform-transceiver-types:ddm_cmm_trans_type_t
| +--ro vendor-name?        string
| +--ro vendor-serial-number? string
| +--ro connector-type?     ipi-platform-transceiver-types:ddm_cmm_trans_connector_type_t
+---n transceiver-removed {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro port-no?           uint8
| +--ro type?              ipi-platform-transceiver-types:ddm_cmm_trans_type_t
| +--ro vendor-name?        string
| +--ro vendor-serial-number? string
| +--ro connector-type?     ipi-platform-transceiver-types:ddm_cmm_trans_connector_type_t
+---n faulty-transceiver-inserted {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro port-no?           uint8

```

---

---

```

| +--ro type?      ipi-platform-transceiver-types:ddm_cmm_trans_type_t
+---n incompatible-transceiver-inserted {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?      string
| +--ro port-no?   uint8
+---n incompatible-transceiver-removed {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?      string
| +--ro port-no?   uint8
+---n frequency-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro frequency-error?   decimal64
| +--ro frequency-error-critical-min-threshold? decimal64
| +--ro frequency-error-critical-max-threshold? decimal64
+---n frequency-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro frequency-error?   decimal64
| +--ro frequency-error-critical-min-threshold? decimal64
| +--ro frequency-error-critical-max-threshold? decimal64
+---n frequency-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro frequency-error?   decimal64
| +--ro frequency-error-alert-min-threshold? decimal64
| +--ro frequency-error-alert-max-threshold? decimal64
+---n frequency-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string

```

---

---

```
| +--ro frequency-error?          decimal64
| +--ro frequency-error-alert-min-threshold? decimal64
| +--ro frequency-error-alert-max-threshold? decimal64
+---n frequency-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro frequency-error?    decimal64
+---n wavelength-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro wavelength-error?   decimal64
| +--ro wavelength-error-critical-min-threshold? decimal64
| +--ro wavelength-error-critical-max-threshold? decimal64
+---n wavelength-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro wavelength-error?   decimal64
| +--ro wavelength-error-critical-min-threshold? decimal64
| +--ro wavelength-error-critical-max-threshold? decimal64
+---n wavelength-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro wavelength-error?   decimal64
| +--ro wavelength-error-alert-min-threshold? decimal64
| +--ro wavelength-error-alert-max-threshold? decimal64
+---n wavelength-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro wavelength-error?   decimal64
| +--ro wavelength-error-alert-min-threshold? decimal64
| +--ro wavelength-error-alert-max-threshold? decimal64
```

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---

```
+---n wavelength-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro wavelength-error? decimal64
+---n thermoelectric-cooler-fault-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro thermoelectric-cooler-fault? boolean
+---n thermoelectric-cooler-fault-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro thermoelectric-cooler-fault? boolean
+---n rx-loss-of-signal {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro index?         uint8
| +--ro name?          string
+---n rx-loss-of-signal-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro index?         uint8
| +--ro name?          string
+---n input-power-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro index?         uint8
| +--ro name?          string
| +--ro input-power?    decimal64
| +--ro input-power-critical-min-threshold? decimal64
| +--ro input-power-critical-max-threshold? decimal64
+---n input-power-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
```

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---

```
| +--ro index?                uint8
| +--ro name?                 string
| +--ro input-power?          decimal64
| +--ro input-power-critical-min-threshold? decimal64
| +--ro input-power-critical-max-threshold? decimal64
+---n input-power-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?             cml-data-types:cml_notif_severity_t
| +--ro eventClass?           cml-data-types:cml_notif_class_t
| +--ro index?                uint8
| +--ro name?                 string
| +--ro input-power?          decimal64
| +--ro input-power-alert-min-threshold? decimal64
| +--ro input-power-alert-max-threshold? decimal64
+---n input-power-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?             cml-data-types:cml_notif_severity_t
| +--ro eventClass?           cml-data-types:cml_notif_class_t
| +--ro index?                uint8
| +--ro name?                 string
| +--ro input-power?          decimal64
| +--ro input-power-alert-min-threshold? decimal64
| +--ro input-power-alert-max-threshold? decimal64
+---n input-power-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?             cml-data-types:cml_notif_severity_t
| +--ro eventClass?           cml-data-types:cml_notif_class_t
| +--ro index?                uint8
| +--ro name?                 string
| +--ro input-power?          decimal64
+---n output-power-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?             cml-data-types:cml_notif_severity_t
| +--ro eventClass?           cml-data-types:cml_notif_class_t
| +--ro index?                uint8
| +--ro name?                 string
| +--ro output-power?          decimal64
| +--ro output-power-critical-min-threshold? decimal64
| +--ro output-power-critical-max-threshold? decimal64
+---n output-power-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
```

---

---

```

| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro index?             uint8
| +--ro name?              string
| +--ro output-power?      decimal64
| +--ro output-power-critical-min-threshold? decimal64
| +--ro output-power-critical-max-threshold? decimal64
+---n output-power-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro index?             uint8
| +--ro name?              string
| +--ro output-power?      decimal64
| +--ro output-power-alert-min-threshold? decimal64
| +--ro output-power-alert-max-threshold? decimal64
+---n output-power-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro index?             uint8
| +--ro name?              string
| +--ro output-power?      decimal64
| +--ro output-power-alert-min-threshold? decimal64
| +--ro output-power-alert-max-threshold? decimal64
+---n output-power-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro index?             uint8
| +--ro name?              string
| +--ro output-power?      decimal64
+---n laser-bias-current-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro index?             uint8
| +--ro name?              string
| +--ro laser-bias-current? decimal64
| +--ro laser-bias-current-critical-min-threshold? decimal64

```

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```

| +--ro laser-bias-current-critical-max-threshold? decimal64
+---n laser-bias-current-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro index? uint8
| +--ro name? string
| +--ro laser-bias-current? decimal64
| +--ro laser-bias-current-critical-min-threshold? decimal64
| +--ro laser-bias-current-critical-max-threshold? decimal64
+---n laser-bias-current-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro index? uint8
| +--ro name? string
| +--ro laser-bias-current? decimal64
| +--ro laser-bias-current-alert-min-threshold? decimal64
| +--ro laser-bias-current-alert-max-threshold? decimal64
+---n laser-bias-current-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro index? uint8
| +--ro name? string
| +--ro laser-bias-current? decimal64
| +--ro laser-bias-current-alert-min-threshold? decimal64
| +--ro laser-bias-current-alert-max-threshold? decimal64
+---n laser-bias-current-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro index? uint8
| +--ro name? string
| +--ro laser-bias-current? decimal64
+---n transceiver-temperature-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro transceiver-temperature? decimal64

```

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---

```
| +--ro temperature-critical-min-threshold? decimal64
| +--ro temperature-critical-max-threshold? decimal64
+---n transceiver-temperature-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro transceiver-temperature? decimal64
| +--ro temperature-critical-min-threshold? decimal64
| +--ro temperature-critical-max-threshold? decimal64
+---n transceiver-temperature-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro transceiver-temperature? decimal64
| +--ro temperature-alert-min-threshold? decimal64
| +--ro temperature-alert-max-threshold? decimal64
+---n transceiver-temperature-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro transceiver-temperature? decimal64
| +--ro temperature-alert-min-threshold? decimal64
| +--ro temperature-alert-max-threshold? decimal64
+---n transceiver-temperature-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro transceiver-temperature? decimal64
+---n transceiver-voltage-error-high-critical {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro transceiver-voltage? decimal64
| +--ro voltage-critical-min-threshold? decimal64
| +--ro voltage-critical-max-threshold? decimal64
+---n transceiver-voltage-error-low-critical {feature-list:NOT_HAVE_TIBIT}?
```

---



---

```
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro transceiver-voltage? decimal64
| +--ro voltage-critical-min-threshold? decimal64
| +--ro voltage-critical-max-threshold? decimal64
+---n transceiver-voltage-error-high-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro transceiver-voltage? decimal64
| +--ro voltage-alert-min-threshold? decimal64
| +--ro voltage-alert-max-threshold? decimal64
+---n transceiver-voltage-error-low-alert {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro transceiver-voltage? decimal64
| +--ro voltage-alert-min-threshold? decimal64
| +--ro voltage-alert-max-threshold? decimal64
+---n transceiver-voltage-error-recovery {feature-list:NOT_HAVE_TIBIT}?
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro transceiver-voltage? decimal64
+---n temperature-high
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro alarm-status?      boolean
| +--ro alarm-threshold?   decimal64
| +--ro instant?           decimal64
+---n temperature-low
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
```

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---

```
| +--ro alarm-status?    boolean
| +--ro alarm-threshold? decimal64
| +--ro instant?         decimal64
+---n power-supply-inserted
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
+---n power-supply-removed
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
+---n power-supply-ac-failed
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
+---n power-supply-ac-recovery
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
+---n power-supply-12v-failed
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
+---n power-supply-12v-recovery
| +--ro severity?    cml-data-types:cml_notif_severity_t
| +--ro eventClass?  cml-data-types:cml_notif_class_t
| +--ro name?        string
+---n psu-vin-low-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro input-voltage?      decimal64
| +--ro vin-alert-threshold-min? decimal64
| +--ro vin-alert-threshold-max? decimal64
+---n psu-vin-high-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
```

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---

```
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro name?                string
| +--ro input-voltage?       decimal64
| +--ro vin-alert-threshold-min? decimal64
| +--ro vin-alert-threshold-max? decimal64
+---n psu-vin-low-critical
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro input-voltage?       decimal64
| +--ro vin-critical-threshold-min? decimal64
| +--ro vin-critical-threshold-max? decimal64
+---n psu-vin-high-critical
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro input-voltage?       decimal64
| +--ro vin-critical-threshold-min? decimal64
| +--ro vin-critical-threshold-max? decimal64
+---n psu-vin-low-alert-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro input-voltage?       decimal64
| +--ro vin-alert-threshold-min? decimal64
| +--ro vin-alert-threshold-max? decimal64
+---n psu-vin-high-alert-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro input-voltage?       decimal64
| +--ro vin-alert-threshold-min? decimal64
| +--ro vin-alert-threshold-max? decimal64
+---n psu-vin-low-critical-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
```

---

---

```
| +--ro name?                string
| +--ro input-voltage?       decimal64
| +--ro vin-critical-threshold-min? decimal64
| +--ro vin-critical-threshold-max? decimal64
+---n psu-vin-high-critical-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro input-voltage?      decimal64
| +--ro vin-critical-threshold-min? decimal64
| +--ro vin-critical-threshold-max? decimal64
+---n psu-vout-low-alert
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-voltage?     decimal64
| +--ro vout-alert-threshold-min? decimal64
| +--ro vout-alert-threshold-max? decimal64
+---n psu-vout-high-alert
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-voltage?     decimal64
| +--ro vout-alert-threshold-min? decimal64
| +--ro vout-alert-threshold-max? decimal64
+---n psu-vout-low-critical
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-voltage?     decimal64
| +--ro vout-critical-threshold-min? decimal64
| +--ro vout-critical-threshold-max? decimal64
+---n psu-vout-high-critical
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
```

---

---

```
| +--ro output-voltage?          decimal64
| +--ro vout-critical-threshold-min? decimal64
| +--ro vout-critical-threshold-max? decimal64
+---n psu-vout-low-alert-recovery
| +--ro severity?               cml-data-types:cml_notif_severity_t
| +--ro eventClass?             cml-data-types:cml_notif_class_t
| +--ro name?                   string
| +--ro output-voltage?         decimal64
| +--ro vout-alert-threshold-min? decimal64
| +--ro vout-alert-threshold-max? decimal64
+---n psu-vout-high-alert-recovery
| +--ro severity?               cml-data-types:cml_notif_severity_t
| +--ro eventClass?             cml-data-types:cml_notif_class_t
| +--ro name?                   string
| +--ro output-voltage?         decimal64
| +--ro vout-alert-threshold-min? decimal64
| +--ro vout-alert-threshold-max? decimal64
+---n psu-vout-low-critical-recovery
| +--ro severity?               cml-data-types:cml_notif_severity_t
| +--ro eventClass?             cml-data-types:cml_notif_class_t
| +--ro name?                   string
| +--ro output-voltage?         decimal64
| +--ro vout-critical-threshold-min? decimal64
| +--ro vout-critical-threshold-max? decimal64
+---n psu-vout-high-critical-recovery
| +--ro severity?               cml-data-types:cml_notif_severity_t
| +--ro eventClass?             cml-data-types:cml_notif_class_t
| +--ro name?                   string
| +--ro output-voltage?         decimal64
| +--ro vout-critical-threshold-min? decimal64
| +--ro vout-critical-threshold-max? decimal64
+---n psu-pin-low-alert
| +--ro severity?               cml-data-types:cml_notif_severity_t
| +--ro eventClass?             cml-data-types:cml_notif_class_t
| +--ro name?                   string
| +--ro input-power?            decimal64
```

---

```
| +--ro pin-alert-threshold-min?  decimal64
| +--ro pin-alert-threshold-max?  decimal64
+---n psu-pin-high-alert
| +--ro severity?                 cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-alert-threshold-min?  decimal64
| +--ro pin-alert-threshold-max?  decimal64
+---n psu-pin-low-critical
| +--ro severity?                 cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-critical-threshold-min? decimal64
| +--ro pin-critical-threshold-max? decimal64
+---n psu-pin-high-critical
| +--ro severity?                 cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-critical-threshold-min? decimal64
| +--ro pin-critical-threshold-max? decimal64
+---n psu-pin-low-alert-recovery
| +--ro severity?                 cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-alert-threshold-min?  decimal64
| +--ro pin-alert-threshold-max?  decimal64
+---n psu-pin-high-alert-recovery
| +--ro severity?                 cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-alert-threshold-min?  decimal64
```

---

---

```
| +--ro pin-alert-threshold-max?  decimal64
+---n psu-pin-low-critical-recovery
| +--ro severity?                cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-critical-threshold-min? decimal64
| +--ro pin-critical-threshold-max? decimal64
+---n psu-pin-high-critical-recovery
| +--ro severity?                cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro input-power?             decimal64
| +--ro pin-critical-threshold-min? decimal64
| +--ro pin-critical-threshold-max? decimal64
+---n psu-pout-low-alert
| +--ro severity?                cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro power-consumption?       decimal64
| +--ro pout-alert-threshold-min? decimal64
| +--ro pout-alert-threshold-max? decimal64
+---n psu-pout-high-alert
| +--ro severity?                cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro power-consumption?       decimal64
| +--ro pout-alert-threshold-min? decimal64
| +--ro pout-alert-threshold-max? decimal64
+---n psu-pout-low-critical
| +--ro severity?                cml-data-types:cml_notif_severity_t
| +--ro eventClass?              cml-data-types:cml_notif_class_t
| +--ro name?                    string
| +--ro power-consumption?       decimal64
| +--ro pout-critical-threshold-min? decimal64
| +--ro pout-critical-threshold-max? decimal64
```

---

```
+---n psu-pout-high-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro power-consumption?  decimal64
| +--ro pout-critical-threshold-min? decimal64
| +--ro pout-critical-threshold-max? decimal64
+---n psu-pout-low-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro power-consumption?  decimal64
| +--ro pout-alert-threshold-min? decimal64
| +--ro pout-alert-threshold-max? decimal64
+---n psu-pout-high-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro power-consumption?  decimal64
| +--ro pout-alert-threshold-min? decimal64
| +--ro pout-alert-threshold-max? decimal64
+---n psu-pout-low-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro power-consumption?  decimal64
| +--ro pout-critical-threshold-min? decimal64
| +--ro pout-critical-threshold-max? decimal64
+---n psu-pout-high-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro power-consumption?  decimal64
| +--ro pout-critical-threshold-min? decimal64
| +--ro pout-critical-threshold-max? decimal64
+---n psu-iout-low-alert
```



---

```
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-current?    decimal64
| +--ro iout-alert-threshold-min? decimal64
| +--ro iout-alert-threshold-max? decimal64
+---n psu-iout-high-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-current?    decimal64
| +--ro iout-alert-threshold-min? decimal64
| +--ro iout-alert-threshold-max? decimal64
+---n psu-iout-low-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-current?    decimal64
| +--ro iout-critical-threshold-min? decimal64
| +--ro iout-critical-threshold-max? decimal64
+---n psu-iout-high-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-current?    decimal64
| +--ro iout-critical-threshold-min? decimal64
| +--ro iout-critical-threshold-max? decimal64
+---n psu-iout-low-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro output-current?    decimal64
| +--ro iout-alert-threshold-min? decimal64
| +--ro iout-alert-threshold-max? decimal64
+---n psu-iout-high-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
```

---

---

```
| +--ro eventClass?          cml-data-types:cml_notif_class_t
| +--ro name?                string
| +--ro output-current?      decimal64
| +--ro iout-alert-threshold-min? decimal64
| +--ro iout-alert-threshold-max? decimal64
+---n psu-iout-low-critical-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro output-current?     decimal64
| +--ro iout-critical-threshold-min? decimal64
| +--ro iout-critical-threshold-max? decimal64
+---n psu-iout-high-critical-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro output-current?     decimal64
| +--ro iout-critical-threshold-min? decimal64
| +--ro iout-critical-threshold-max? decimal64
+---n psu-iin-low-alert
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro input-current?      decimal64
| +--ro iin-alert-threshold-min? decimal64
| +--ro iin-alert-threshold-max? decimal64
+---n psu-iin-high-alert
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?               string
| +--ro input-current?      decimal64
| +--ro iin-alert-threshold-min? decimal64
| +--ro iin-alert-threshold-max? decimal64
+---n psu-iin-low-critical
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
```

---

---

```
| +--ro name?                string
| +--ro input-current?       decimal64
| +--ro iin-critical-threshold-min? decimal64
| +--ro iin-critical-threshold-max? decimal64
+---n psu-iin-high-critical
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro input-current?       decimal64
| +--ro iin-critical-threshold-min? decimal64
| +--ro iin-critical-threshold-max? decimal64
+---n psu-iin-low-alert-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro input-current?       decimal64
| +--ro iin-alert-threshold-min? decimal64
| +--ro iin-alert-threshold-max? decimal64
+---n psu-iin-high-alert-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro input-current?       decimal64
| +--ro iin-alert-threshold-min? decimal64
| +--ro iin-alert-threshold-max? decimal64
+---n psu-iin-low-critical-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro input-current?       decimal64
| +--ro iin-critical-threshold-min? decimal64
| +--ro iin-critical-threshold-max? decimal64
+---n psu-iin-high-critical-recovery
| +--ro severity?           cml-data-types:cml_notif_severity_t
| +--ro eventClass?         cml-data-types:cml_notif_class_t
| +--ro name?              string
```

---

---

```
| +--ro input-current?          decimal64
| +--ro iin-critical-threshold-min? decimal64
| +--ro iin-critical-threshold-max? decimal64
+---n psu-temp1-low-alert
| +--ro severity?              cml-data-types:cml_notif_severity_t
| +--ro eventClass?            cml-data-types:cml_notif_class_t
| +--ro name?                  string
| +--ro temperature-sensor1?    decimal64
| +--ro temp1-alert-threshold-min? decimal64
| +--ro temp1-alert-threshold-max? decimal64
+---n psu-temp1-high-alert
| +--ro severity?              cml-data-types:cml_notif_severity_t
| +--ro eventClass?            cml-data-types:cml_notif_class_t
| +--ro name?                  string
| +--ro temperature-sensor1?    decimal64
| +--ro temp1-alert-threshold-min? decimal64
| +--ro temp1-alert-threshold-max? decimal64
+---n psu-temp1-low-critical
| +--ro severity?              cml-data-types:cml_notif_severity_t
| +--ro eventClass?            cml-data-types:cml_notif_class_t
| +--ro name?                  string
| +--ro temperature-sensor1?    decimal64
| +--ro temp1-critical-threshold-min? decimal64
| +--ro temp1-critical-threshold-max? decimal64
+---n psu-temp1-high-critical
| +--ro severity?              cml-data-types:cml_notif_severity_t
| +--ro eventClass?            cml-data-types:cml_notif_class_t
| +--ro name?                  string
| +--ro temperature-sensor1?    decimal64
| +--ro temp1-critical-threshold-min? decimal64
| +--ro temp1-critical-threshold-max? decimal64
+---n psu-temp1-low-alert-recovery
| +--ro severity?              cml-data-types:cml_notif_severity_t
| +--ro eventClass?            cml-data-types:cml_notif_class_t
| +--ro name?                  string
| +--ro temperature-sensor1?    decimal64
```

---

```
| +--ro temp1-alert-threshold-min? decimal64
| +--ro temp1-alert-threshold-max? decimal64
+---n psu-temp1-high-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor1? decimal64
| +--ro temp1-alert-threshold-min? decimal64
| +--ro temp1-alert-threshold-max? decimal64
+---n psu-temp1-low-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor1? decimal64
| +--ro temp1-critical-threshold-min? decimal64
| +--ro temp1-critical-threshold-max? decimal64
+---n psu-temp1-high-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor1? decimal64
| +--ro temp1-critical-threshold-min? decimal64
| +--ro temp1-critical-threshold-max? decimal64
+---n psu-temp2-low-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-alert-threshold-min? decimal64
| +--ro temp2-alert-threshold-max? decimal64
+---n psu-temp2-high-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-alert-threshold-min? decimal64
```

---

```
| +--ro temp2-alert-threshold-max? decimal64
+---n psu-temp2-low-critical
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-critical-threshold-min? decimal64
| +--ro temp2-critical-threshold-max? decimal64
+---n psu-temp2-high-critical
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-critical-threshold-min? decimal64
| +--ro temp2-critical-threshold-max? decimal64
+---n psu-temp2-low-alert-recovery
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-alert-threshold-min? decimal64
| +--ro temp2-alert-threshold-max? decimal64
+---n psu-temp2-high-alert-recovery
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-alert-threshold-min? decimal64
| +--ro temp2-alert-threshold-max? decimal64
+---n psu-temp2-low-critical-recovery
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name? string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-critical-threshold-min? decimal64
| +--ro temp2-critical-threshold-max? decimal64
```

---

```
+---n psu-temp2-high-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor2? decimal64
| +--ro temp2-critical-threshold-min? decimal64
| +--ro temp2-critical-threshold-max? decimal64
+---n psu-temp3-low-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-alert-threshold-min? decimal64
| +--ro temp3-alert-threshold-max? decimal64
+---n psu-temp3-high-alert
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-alert-threshold-min? decimal64
| +--ro temp3-alert-threshold-max? decimal64
+---n psu-temp3-low-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-critical-threshold-min? decimal64
| +--ro temp3-critical-threshold-max? decimal64
+---n psu-temp3-high-critical
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-critical-threshold-min? decimal64
| +--ro temp3-critical-threshold-max? decimal64
+---n psu-temp3-low-alert-recovery
```

---

---

```
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-alert-threshold-min? decimal64
| +--ro temp3-alert-threshold-max? decimal64
+---n psu-temp3-high-alert-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-alert-threshold-min? decimal64
| +--ro temp3-alert-threshold-max? decimal64
+---n psu-temp3-low-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-critical-threshold-min? decimal64
| +--ro temp3-critical-threshold-max? decimal64
+---n psu-temp3-high-critical-recovery
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro name?              string
| +--ro temperature-sensor3? decimal64
| +--ro temp3-critical-threshold-min? decimal64
| +--ro temp3-critical-threshold-max? decimal64
+---n fan-status-alarm
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?      string
| +--ro fan-index?  uint8
| +--ro fan-status? cml_cmm_fan_status_t
+---n fan-status-alarm-recovery
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
```

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---

```
| +--ro name?      string
| +--ro fan-index?  uint8
| +--ro fan-status? cml_cmm_fan_status_t
+---n fan-rpm-max-alert
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?       string
| +--ro maximum-rpm? uint32
+---n fan-rpm-decreased-notify
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?       string
| +--ro rpm?        uint32
+---n fan-rpm-increased-notify
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?       string
| +--ro rpm?        uint32
+---n fan-tray-inserted
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?       string
+---n fan-tray-removed
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro name?       string
+---n hardware-tcam-util-warning-notification {feature-list:HAVE_BROADCOM}?
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro group-id?   uint32
| +--ro group-name? cml-data-types:cml_line_t
| +--ro used-percentage? int32
| +--ro free-entries? int32
+---n hardware-tcam-util-recovery-warning-notification {feature-list:HAVE_BROADCOM}?
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
```

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---

```
| +--ro group-id?      uint32
| +--ro group-name?    cml-data-types:cml_line_t
| +--ro used-percentage? int32
| +--ro free-entries?  int32
+---n hardware-tcam-util-critical-notification {feature-list:HAVE_BROADCOM}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro group-id?      uint32
| +--ro group-name?    cml-data-types:cml_line_t
| +--ro used-percentage? int32
| +--ro free-entries?  int32
+---n hardware-tcam-util-recovery-critical-notification {feature-list:HAVE_BROADCOM}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro group-id?      uint32
| +--ro group-name?    cml-data-types:cml_line_t
| +--ro used-percentage? int32
| +--ro free-entries?  int32
+---n platform-interface-load-balance-update {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_MARVELL}?
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro type?          ipi-platform-profile-types:platform_lacp_psc_t
+---n loss-of-input-clock
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro loss-of-input-clock-status? uint8
+---n usb-over-current
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro usb-over-current-status? uint8
+---n cmis-module-monitor-alarm-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
```

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---

```
| +--ro name?          string
| +--ro alarm-id?      ipi-platform-cmis-types:cmm_cmis_module_monitor_id_t
| +--ro alarm-type?    ipi-platform-cmis-types:cmm_cmis_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n cmis-module-monitor-recovery-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro name?          string
| +--ro alarm-id?      ipi-platform-cmis-types:cmm_cmis_module_monitor_id_t
| +--ro alarm-type?    ipi-platform-cmis-types:cmm_cmis_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n cmis-module-host-monitor-alarm-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro number?        uint8
| +--ro name?          string
| +--ro alarm-id?      ipi-platform-cmis-types:cmm_cmis_host_monitor_id_t
| +--ro alarm-type?    ipi-platform-cmis-types:cmm_cmis_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n cmis-module-host-monitor-recovery-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro number?        uint8
| +--ro name?          string
| +--ro alarm-id?      ipi-platform-cmis-types:cmm_cmis_host_monitor_id_t
| +--ro alarm-type?    ipi-platform-cmis-types:cmm_cmis_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n cmis-module-host-flag-alarm-notification
```

---

---

```
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro number?     uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-cmis-types:cmm_cmis_host_flag_id_t
+---n cmis-module-host-flag-recovery-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro number?     uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-cmis-types:cmm_cmis_host_flag_id_t
+---n cmis-module-media-monitor-alarm-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro number?     uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-cmis-types:cmm_cmis_media_monitor_id_t
| +--ro alarm-type?  ipi-platform-cmis-types:cmm_cmis_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n cmis-module-media-monitor-recovery-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro number?     uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-cmis-types:cmm_cmis_media_monitor_id_t
| +--ro alarm-type?  ipi-platform-cmis-types:cmm_cmis_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n cmis-module-media-flag-alarm-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro number?     uint8
| +--ro name?       string
```

---

---

```
| +--ro alarm-id?   ipi-platform-cmis-types:cm_m_cmis_media_flag_id_t
+---n cmis-module-media-flag-recovery-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro number?     uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-cmis-types:cm_m_cmis_media_flag_id_t
+---n edfa-alarm-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro port?       uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-transceiver-types:cm_m_edfa_ddm_monitor_id_t
| +--ro alarm-type? ipi-platform-transceiver-types:cm_m_ddm_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n edfa-alarm-recovery-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro port?       uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-transceiver-types:cm_m_edfa_ddm_monitor_id_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n smart-sfp-ddm-alarm-notification
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro port?       uint8
| +--ro name?       string
| +--ro alarm-id?   ipi-platform-transceiver-types:cm_m_smart_sfp_ddm_monitor_id_t
| +--ro alarm-type? ipi-platform-transceiver-types:cm_m_ddm_threshold_alarm_t
| +--ro current-value? decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
```

---

```

+---n smart-sfp-ddm-alarm-recovery-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro port?          uint8
| +--ro name?          string
| +--ro alarm-id?      ipi-platform-transceiver-types:cmm_smart_sfp_ddm_monitor_id_t
| +--ro current-value?  decimal64
| +--ro threshold-minimum? decimal64
| +--ro threshold-maximum? decimal64
+---n smart-sfp-descrete-alarm-notification
| +--ro severity?      cml-data-types:cml_notif_severity_t
| +--ro eventClass?    cml-data-types:cml_notif_class_t
| +--ro port?          uint8
| +--ro name?          string
| +--ro alarm-id?      ipi-platform-transceiver-types:cmm_smart_sfp_protocol_alarm_id_t
| +--ro current-status? ipi-platform-transceiver-types:cmm_smart_sfp_protocol_status_t
+---n smart-sfp-descrete-alarm-recovery-notification
  +--ro severity?      cml-data-types:cml_notif_severity_t
  +--ro eventClass?    cml-data-types:cml_notif_class_t
  +--ro port?          uint8
  +--ro name?          string
  +--ro alarm-id?      ipi-platform-transceiver-types:cmm_smart_sfp_protocol_alarm_id_t
  +--ro current-status? ipi-platform-transceiver-types:cmm_smart_sfp_protocol_status_t

```

---

## module: ipi-port-breakout

```

+--rw port-breakout
  +--rw breakouts
  | +--rw breakout* [interface]
  |   +--rw interface -> ../config/interface
  |   +--rw config
  |     | +--rw interface? string
  |     | +--rw mode      ipi-port-breakout-types:port_breakout_mode_t
  |     | +--rw serdes?   ipi-port-breakout-types:port_breakout_serdes_type_t

```

```

|   +--ro state
|   +--ro interface?  string
|   +--ro mode        ipi-port-breakout-types:port_breakout_mode_t
|   +--ro serdes?     ipi-port-breakout-types:port_breakout_serdes_type_t
|   +--ro block?      uint8
+--rw groups-speed
| +--rw group-speed* [port-group] {feature-list:NOT_HAVE_DUNE}?
| +--rw port-group   -> ../config/port-group
| +--rw config
| | +--rw port-group? uint8
| | +--rw speed       ipi-port-breakout-types:port_breakout_group_speed_t
| +--ro state
|   +--ro port-group? uint8
|   +--ro speed       ipi-port-breakout-types:port_breakout_group_speed_t
|   +--ro ports*      uint8
+--rw interfaces
  +--rw interface* [name]
    +--rw name      -> ../config/name
    +--rw config
    | +--rw name?   -> /ipi-interface:interfaces/interface/name
    | +--rw mode?   ipi-port-breakout-types:port_breakout_if_mode_t
    +--ro state
      +--ro name?   -> /ipi-interface:interfaces/interface/name
      +--ro mode?   ipi-port-breakout-types:port_breakout_if_mode_t

```

---

## module: ipi-port-mirror

```

+--rw port-mirror
  +--rw sessions
  | +--rw session* [id] {feature-list:HAVE_ADVANCE_MIRROR}?
  | +--rw id        -> ../config/id
  | +--rw config
  | | +--rw id?      uint32
  | | +--rw type      ipi-port-mirror-types:pmirror_sess_type_t
  | | +--rw enabled?  empty

```

---

```

| | +--rw description? cml-data-types:cml_line_t
| | +--rw source-vlan? cml-data-types:cml_range_t
| +--ro state
| | +--ro counters
| | | +--ro filter-count? yang:counter32
| | | +--ro tx-source-count? yang:counter32
| | +--ro id? uint32
| | +--ro type ipi-port-mirror-types:pmirror_sess_type_t
| | +--ro enabled? empty
| | +--ro description? cml-data-types:cml_line_t
| | +--ro source-vlan? cml-data-types:cml_range_t
| +--rw destination
| | +--rw local
| | | +--rw config
| | | | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
| | | | +--ro state
| | | | +--ro interface-name? -> /ipi-interface:interfaces/interface/name
| | +--rw remote
| | +--rw config!
| | | +--rw vlan-id uint16
| | | +--rw reflector-interface-name -> /ipi-interface:interfaces/interface/name
| | +--ro state
| | +--ro vlan-id uint16
| | +--ro reflector-interface-name -> /ipi-interface:interfaces/interface/name
| +--rw source-interfaces
| | +--rw source-interface* [name]
| | +--rw name -> ../config/name
| | +--rw config!
| | | +--rw name? -> /ipi-interface:interfaces/interface/name
| | | +--rw direction ipi-port-mirror-types:pmirror_dir_t
| | +--ro state
| | +--ro name? -> /ipi-interface:interfaces/interface/name
| | +--ro direction ipi-port-mirror-types:pmirror_dir_t
| +--rw session-filters
| +--rw session-filter* [seq-id]
| +--rw seq-id -> ../config/seq-id

```

---



---

```

|   +--rw config
|   |   +--rw seq-id?  uint32
|   |   +--ro state
|   |   |   +--ro seq-id?  uint32
|   |   +--rw filters
|   |       +--rw config
|   |       |   +--rw (destination-mac-options)?
|   |       |   |   +--:(host-mac)
|   |       |   |   |   +--rw destination-mac-address-host?  ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   |   +--:(mac-with-mask)
|   |       |   |   |   +--rw destination-mac-address?      ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   |   +--rw destination-mac-mask?        ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   +--rw frame-type?                      ipi-port-mirror-types:pmirror_ethertype_t
|   |       |   |   +--rw arp-type?                        ipi-port-mirror-types:pmirror_arp_type_t
|   |       |   |   +--rw sender-ip-address?               inet:ipv4-address
|   |       |   |   +--rw target-ip-address?               inet:ipv4-address
|   |       |   |   +--rw cos?                             uint8
|   |       |   |   +--rw vlan?                            cml-data-types:cml_range_t
|   |       |   |   +--rw inner-vlan?                      cml-data-types:cml_range_t {feature-list:NOT_HAVE_DUNE}?
|   |       |   |   +--rw source-ipv4-address?             cml-data-types:cml_ipv4_addr_or_prefix_t
|   |       |   |   +--rw destination-ipv4-address?        cml-data-types:cml_ipv4_addr_or_prefix_t
|   |       |   |   +--rw source-ipv6-address?             cml-data-types:cml_ipv6_prefix_t
|   |       |   |   +--rw destination-ipv6-address?        cml-data-types:cml_ipv6_prefix_t
|   |       |   +--rw (source-mac-options)?
|   |       |   |   +--:(host-mac)
|   |       |   |   |   +--rw source-mac-address-host?     ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   |   +--:(mac-with-mask)
|   |       |   |   |   +--rw source-mac-address?          ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   |   +--rw source-mac-mask?             ipi-port-mirror-types:pmirror_mac_addr_t
|   |       +--ro state
|   |       |   +--ro (destination-mac-options)?
|   |       |   |   +--:(host-mac)
|   |       |   |   |   +--ro destination-mac-address-host? ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   |   +--:(mac-with-mask)
|   |       |   |   |   +--ro destination-mac-address?      ipi-port-mirror-types:pmirror_mac_addr_t
|   |       |   |   |   +--ro destination-mac-mask?        ipi-port-mirror-types:pmirror_mac_addr_t

```

---

---

```

|      +--ro frame-type?          ipi-port-mirror-types:pmirror_ethertype_t
|      +--ro arp-type?           ipi-port-mirror-types:pmirror_arp_type_t
|      +--ro sender-ip-address?   inet:ipv4-address
|      +--ro target-ip-address?   inet:ipv4-address
|      +--ro cos?                 uint8
|      +--ro vlan?                cml-data-types:cml_range_t
|      +--ro inner-vlan?          cml-data-types:cml_range_t {feature-list:NOT_HAVE_DUNE}?
|      +--ro source-ipv4-address?  cml-data-types:cml_ipv4_addr_or_prefix_t
|      +--ro destination-ipv4-address? cml-data-types:cml_ipv4_addr_or_prefix_t
|      +--ro source-ipv6-address?  cml-data-types:cml_ipv6_prefix_t
|      +--ro destination-ipv6-address? cml-data-types:cml_ipv6_prefix_t
|      +--ro (source-mac-options)?
|          +--:(host-mac)
|              | +--ro source-mac-address-host?    ipi-port-mirror-types:pmirror_mac_addr_t
|              +--:(mac-with-mask)
|                  +--ro source-mac-address?        ipi-port-mirror-types:pmirror_mac_addr_t
|                  +--ro source-mac-mask?           ipi-port-mirror-types:pmirror_mac_addr_t
+--rw interfaces

```

---

## module: ipi-port-vlan

```
augment /ipi-interface:interfaces/ipi-interface:interface:
```

```

+--rw port-vlan
+--rw global
| +--rw config
| | +--rw isolated-vlan-id?      cml-data-types:cml_range_t {feature-list:NOT_HAVE_SWFWDR}?
| | +--rw cvlan-registration-table? -> /ipi-network-instance:network-instances/network-instance/ipi-bridge:bridge/
ipi-vlan:cvlan-registration-tables/cvlan-registration-table/config/table-name {feature-list:HAVE_PROVIDER_BRIDGE}?
| +--ro state
|   +--ro isolated-vlan-id?      cml-data-types:cml_range_t {feature-list:NOT_HAVE_SWFWDR}?
|   +--ro cvlan-registration-table? -> /ipi-network-instance:network-instances/network-instance/ipi-bridge:bridge/
ipi-vlan:cvlan-registration-tables/cvlan-registration-table/config/table-name {feature-list:HAVE_PROVIDER_BRIDGE}?
+--rw ennis
+--rw switched-vlans

```

```

| +--rw switched-vlan* [interface-mode]
|   +--rw interface-mode      -> ../config/interface-mode
|   +--rw config
|     | +--rw interface-mode?   ipi-port-vlan-types:port_vlan_switch_port_mode_t
|     | +--rw ingress-filter?   cml-data-types:cml_enable_disable_t {feature-list:NOT_HAVE_DUNE}?
|     | +--rw acceptable-frame-type? ipi-port-vlan-types:port_vlan_frame_type_t
|     | +--rw disable-native-vlan? empty
|     | +--rw remove-default-vlan? empty
|     +--ro state
|       | +--ro interface-mode?   ipi-port-vlan-types:port_vlan_switch_port_mode_t
|       | +--ro ingress-filter?   cml-data-types:cml_enable_disable_t {feature-list:NOT_HAVE_DUNE}?
|       | +--ro acceptable-frame-type? ipi-port-vlan-types:port_vlan_frame_type_t
|       | +--ro disable-native-vlan? empty
|       | +--ro remove-default-vlan? empty
|     +--rw vlans
|       | +--rw config
|       | | +--rw vlan-id?      uint16
|       | | +--rw native-vlan-id? uint16
|       | +--ro state
|       | | +--ro vlan-id?      uint16
|       | | +--ro native-vlan-id? uint16
|     +--rw allowed-vlan
|       | +--rw config
|       | | +--rw allowed-vlan-id?      cml-data-types:cml_range_t
|       | | +--rw egress-tagging-disabled-vlans? cml-data-types:cml_range_t
|       | +--ro state
|       | | +--ro allowed-vlan-id?      cml-data-types:cml_range_t
|       | | +--ro egress-tagging-disabled-vlans? cml-data-types:cml_range_t
|     +--rw ce-vlan-translations
|     +--rw svlan-translations
|       | +--rw svlan-translation* [original-svlan-id] {feature-list:HAVE_PROVIDER_BRIDGE}?
|       | | +--rw original-svlan-id -> ../config/original-svlan-id
|       | | +--rw config
|       | | | +--rw translated-svlan-id? uint16
|       | | | +--rw original-svlan-id?  uint16
|       | | | +--rw translated-cvlan-id? uint16

```

---

```

| | | +--rw svlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| | | +--rw svlan-cfi?         uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| | | +--rw cvlan-cos?         uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| | | +--rw cvlan-cfi?         uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| | +--ro state
| |   +--ro translated-svlan-id? uint16
| |   +--ro original-svlan-id?  uint16
| |   +--ro translated-cvlan-id? uint16
| |   +--ro svlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| |   +--ro svlan-cfi?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| |   +--ro cvlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| |   +--ro cvlan-cfi?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
| +--rw cvlan-svlan-translations
|   +--rw cvlan-svlan-translation* [cvlan-id svlan-id] {feature-list:HAVE_PROVIDER_BRIDGE}?
|     +--rw cvlan-id  -> ../config/cvlan-id
|     +--rw svlan-id  -> ../config/svlan-id
|     +--rw config
|       +--rw cvlan-id?          uint16
|       +--rw svlan-id?          uint16
|       +--rw translated-cvlan-id? uint16
|       +--rw translated-svlan-id uint16
|       +--rw svlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|       +--rw svlan-cfi?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|       +--rw cvlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|       +--rw cvlan-cfi?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|       +--ro state
|         +--ro cvlan-id?          uint16
|         +--ro svlan-id?          uint16
|         +--ro translated-cvlan-id? uint16
|         +--ro translated-svlan-id uint16
|         +--ro svlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|         +--ro svlan-cfi?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|         +--ro cvlan-cos?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
|         +--ro cvlan-cfi?          uint8 {feature-list:NOT_HAVE_DUNE,feature-list:NOT_HAVE_POND}?
+--rw port-security
| +--rw config!

```

---

```
| | +--rw mode          ipi-port-vlan-types:port_vlan_port_sec_mode_t
| | +--rw maximum-limit? uint16
| | +--rw logging?      empty
| +--ro state
| | +--ro mode          ipi-port-vlan-types:port_vlan_port_sec_mode_t
| | +--ro maximum-limit? uint16
| | +--ro logging?      empty
| +--rw secure-mac {feature-list:HAVE_PROVIDER_BRIDGE}?
|   +--rw default-vlan-mappings
|     | +--rw default-vlan-mapping* [mac-address]
|     |   +--rw mac-address  -> ../config/mac-address
|     |   +--rw config
|     |     | +--rw mac-address? cml-data-types:cml_mac_addr_t
|     |     | +--ro state
|     |     |   +--ro mac-address? cml-data-types:cml_mac_addr_t
|     +--rw vlan-mappings
|       | +--rw vlan-mapping* [mac-address]
|       |   +--rw mac-address  -> ../config/mac-address
|       |   +--rw config
|       |     | +--rw mac-address? cml-data-types:cml_mac_addr_t
|       |     | +--rw cvlan-id*   uint16
|       |     | +--rw svlan-id*   uint16
|       |     | +--ro state
|       |     |   +--ro mac-address? cml-data-types:cml_mac_addr_t
|       |     |   +--ro cvlan-id*   uint16
|       |     |   +--ro svlan-id*   uint16
|     +--rw cvlan-svlan-mappings
|       +--rw cvlan-svlan-mapping* [mac-address cvlan-id svlan-id]
|       +--rw mac-address  -> ../config/mac-address
|       +--rw cvlan-id     -> ../config/cvlan-id
|       +--rw svlan-id     -> ../config/svlan-id
|       +--rw config
|         | +--rw mac-address? cml-data-types:cml_mac_addr_t
|         | +--rw cvlan-id?   uint16
|         | +--rw svlan-id?   uint16
|         +--ro state
```

---

```

|      +--ro mac-address?  cml-data-types:cml_mac_addr_t
|      +--ro cvlan-id?     uint16
|      +--ro svlan-id?     uint16
+--rw private-vlan {feature-list:HAVE_PVLAN}?
| +--rw config!
| | +--rw mode  ipi-port-vlan-types:port_vlan_pvlan_mode_t
| +--ro state
| | +--ro mode  ipi-port-vlan-types:port_vlan_pvlan_mode_t
| +--rw associations
|   +--rw association* [vlan-id]
|     +--rw vlan-id  -> ../config/vlan-id
|     +--rw config
|       | +--rw vlan-id?          uint16
|       | +--rw associate-vlan-id?  uint16
|       | +--rw mapping-vlan-id?    cml-data-types:cml_range_t
|       | +--rw association-trunk-vlan-id?  uint16
|       +--ro state
|         +--ro vlan-id?          uint16
|         +--ro associate-vlan-id?  uint16
|         +--ro mapping-vlan-id?    cml-data-types:cml_range_t
|         +--ro association-trunk-vlan-id?  uint16
+--rw oep-mappings
augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-bridge:bridge:
+--rw vlan-static-fdb
+--rw entries
+--rw entry* [mac-address vlan-id]
+--rw mac-address  -> ../config/mac-address
+--rw vlan-id      -> ../config/vlan-id
+--rw config
| +--rw interface-name  -> /ipi-interface:interfaces/interface/name
| +--rw mac-address?    cml-data-types:cml_mac_addr_t
| +--rw action          ipi-port-vlan-types:port_vlan_l2_fdb_action_t
| +--rw vlan-id?        uint16
+--ro state
+--ro interface-name  -> /ipi-interface:interfaces/interface/name
+--ro mac-address?    cml-data-types:cml_mac_addr_t

```

---

```

+--ro action      ipi-port-vlan-types:port_vlan_l2_fdb_action_t
+--ro vlan-id?    uint16

```

---

## module: ipi-prefix-list

```

+--rw prefixes
+--rw prefix* [prefix-list-name prefix-list-type]
  +--rw prefix-list-name  -> ../config/prefix-list-name
  +--rw prefix-list-type  -> ../config/prefix-list-type
  +--rw config
    | +--rw prefix-list-name?  string
    | +--rw prefix-list-type?  ipi-prefix-list-types:prefix_list_type_t
    | +--rw description?      cml-data-types:cml_line_t
  +--ro state
    | +--ro prefix-list-name?  string
    | +--ro prefix-list-type?  ipi-prefix-list-types:prefix_list_type_t
    | +--ro description?      cml-data-types:cml_line_t
  +--rw prefix-entries
    +--rw prefix-entry* [sequence-id]
      +--rw sequence-id  -> ../config/sequence-id
      +--rw config
        | +--rw sequence-id?  uint32
      +--ro state
        | +--ro sequence-id?  uint32
      +--rw ipv4
        | +--rw entry* [action prefix-addr]
        |   +--rw action      -> ../config/action
        |   +--rw prefix-addr -> ../config/prefix-addr
        |   +--rw config
        |     | +--rw action?          ipi-prefix-list-types:prefix_list_action_t
        |     | +--rw minimum-prefix-length-match?  uint8
        |     | +--rw maximum-prefix-length-match?  uint8
        |     | +--rw prefix-addr?      ipi-prefix-list-types:prefix_list_ipv4_network_t
        |     | +--rw exact-prefix-length-match?  uint8
        |     +--ro state

```

---

```

|   +--ro action?                ipi-prefix-list-types:prefix_list_action_t
|   +--ro minimum-prefix-length-match? uint8
|   +--ro maximum-prefix-length-match? uint8
|   +--ro prefix-addr?           ipi-prefix-list-types:prefix_list_ipv4_network_t
|   +--ro exact-prefix-length-match? uint8
+--rw ipv6 {feature-list:HAVE_IPV6}?
  +--rw entry* [action ipv6-prefix-addr] {feature-list:HAVE_IPV6}?
    +--rw action                -> ../config/action
    +--rw ipv6-prefix-addr      -> ../config/ipv6-prefix-addr
    +--rw config {feature-list:HAVE_IPV6}?
      | +--rw ipv6-prefix-addr?    ipi-prefix-list-types:prefix_list_ipv6_network_t
      | +--rw action?             ipi-prefix-list-types:prefix_list_action_t
      | +--rw minimum-prefix-length-match? uint8
      | +--rw maximum-prefix-length-match? uint8
      | +--rw exact-prefix-length-match? uint8
      +--ro state {feature-list:HAVE_IPV6}?
        +--ro ipv6-prefix-addr?    ipi-prefix-list-types:prefix_list_ipv6_network_t
        +--ro action?             ipi-prefix-list-types:prefix_list_action_t
        +--ro minimum-prefix-length-match? uint8
        +--ro maximum-prefix-length-match? uint8
        +--ro exact-prefix-length-match? uint8

```

rpcs:

```

+---x clear-prefix-list-all
+---x clear-prefix-list-ipv6-all
+---x clear-ipv4-prefix-list
| +---w input
|   +---w prefix-list-name  string
|   +---w prefix?          cml-data-types:cml_ipv4_addr_prefix_t
+---x clear-ipv6-prefix-list {feature-list:HAVE_IPV6}?
  +---w input
    +---w prefix-list-name  string
    +---w prefix?          cml-data-types:cml_ipv6_prefix_t

```



---

## module: ipi-qos-if

augment /ipi-qos:qos:

```

+--rw interfaces
  +--rw interface* [name]
    +--rw name          -> ../config/name
    +--rw config
      | +--rw name?      -> /ipi-interface:interfaces/interface/name
      | +--rw untagged-priority? uint8
      | +--rw trust-dscp?   empty
      +--ro state
        | +--ro name?      -> /ipi-interface:interfaces/interface/name
        | +--ro untagged-priority? uint8
        | +--ro trust-dscp?   empty
      +--rw remark
        | +--rw config
          | | +--rw cos?   ipi-qos-types:cml_remark_state_t
          | | +--rw dei?   ipi-qos-types:cml_remark_state_t {feature-list:NOT_HAVE_CUSTOM2_QOS}?
          | | +--rw dscp?   ipi-qos-types:cml_remark_state_t
          | +--ro state
            | +--ro cos?   ipi-qos-types:cml_remark_state_t
            | +--ro dei?   ipi-qos-types:cml_remark_state_t {feature-list:NOT_HAVE_CUSTOM2_QOS}?
            | +--ro dscp?   ipi-qos-types:cml_remark_state_t
        +--rw traffic-shape
          | +--rw config!
            | | +--rw rate      uint64
            | | +--rw rate-unit  ipi-qos-types:qos_shape_rate_unit_t
            | | +--rw burst-rate uint64 {feature-list:NOT_HAVE_CUSTOM2_QOS}?
            | +--ro state
              | +--ro rate      uint64
              | +--ro rate-unit  ipi-qos-types:qos_shape_rate_unit_t
              | +--ro burst-rate uint64 {feature-list:NOT_HAVE_CUSTOM2_QOS}?
          +--rw map-profile {feature-list:HAVE_QOS_MAPPING_PROFILE}?
            | +--rw config
              | | +--rw cos-to-queue?   string

```

---

```

| | +--rw dscp-to-queue?    string
| | +--rw precedence-to-queue? string
| | +--rw queue-color-to-cos? string
| | +--rw queue-color-to-dscp? string {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
| | +--rw queue-to-precedence? string {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
| +--ro state
|   +--ro cos-to-queue?    string
|   +--ro dscp-to-queue?   string
|   +--ro precedence-to-queue? string
|   +--ro queue-color-to-cos? string
|   +--ro queue-color-to-dscp? string {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
|   +--ro queue-to-precedence? string {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
+--rw service-policy
  +--rw ingress
  | +--rw config
  | | +--rw type-qos-policy-map-name? string
  | +--ro state
  | | +--ro type-qos-policy-map-name? string
  | +--ro class-maps-level-1
  |   +--ro class-map-level-1* [class-map-name-level-1]
  |     +--ro class-map-name-level-1 -> ../state/class-map-name-level-1
  |     +--ro state
  |       | +--ro class-map-name-level-1? string
  |       | +--ro counters
  |         +--ro matched-packets? yang:counter64
  |         +--ro matched-octets?  yang:counter64
  |         +--ro transmitted-packets? yang:counter64
  |         +--ro transmitted-octets? yang:counter64
  |         +--ro dropped-packets?  yang:counter64
  |         +--ro dropped-octets?   yang:counter64
  |   +--ro class-maps-level-2
  |     +--ro class-map-level-2* [class-map-name-level-2]
  |       +--ro class-map-name-level-2 -> ../state/class-map-name-level-2
  |       +--ro state
  |         | +--ro class-map-name-level-2? string
  |         | +--ro counters

```

---

```

|      |  +--ro matched-packets?    yang:counter64
|      |  +--ro matched-octets?     yang:counter64
|      |  +--ro transmitted-packets? yang:counter64
|      |  +--ro transmitted-octets?  yang:counter64
|      |  +--ro dropped-packets?     yang:counter64
|      |  +--ro dropped-octets?      yang:counter64
|      +--ro class-maps-level-3
|          +--ro class-map-level-3* [class-map-name-level-3]
|              +--ro class-map-name-level-3  -> ../state/class-map-name-level-3
|              +--ro state
|                  +--ro class-map-name-level-3? string
|                  +--ro counters
|                      +--ro matched-packets?    yang:counter64
|                      +--ro matched-octets?     yang:counter64
|                      +--ro transmitted-packets? yang:counter64
|                      +--ro transmitted-octets?  yang:counter64
|                      +--ro dropped-packets?     yang:counter64
|                      +--ro dropped-octets?      yang:counter64
+--rw egress
    +--rw config
        | +--rw type-qos-policy-map-name?    string {feature-
list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM3_QOS_OR_HAVE_CUSTOM4_QOS}?
        | +--rw type-queuing-policy-map-name? string
        +--ro state
            | +--ro type-qos-policy-map-name?    string {feature-
list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM3_QOS_OR_HAVE_CUSTOM4_QOS}?
            | +--ro type-queuing-policy-map-name? string
            +--ro class-maps-level-1
                +--ro class-map-level-1* [class-map-name-level-1]
                    +--ro class-map-name-level-1  -> ../state/class-map-name-level-1
                    +--ro state
                        | +--ro class-map-name-level-1? string
                        | +--ro queues
                        |     +--ro queue* [id]
                        |         +--ro id      uint8
                        |         +--ro counters
                        |             +--ro total-transmitted-packets?    yang:counter64

```

---

```

|      +--ro total-transmitted-octets?    yang:counter64
|      +--ro total-dropped-packets?      yang:counter64
|      +--ro total-dropped-octets?       yang:counter64
|      +--ro green-transmitted-packets?   yang:counter64
|      +--ro non-green-transmitted-packets? yang:counter64
|      +--ro green-dropped-packets?       yang:counter64
|      +--ro yellow-dropped-packets?      yang:counter64
|      +--ro red-dropped-packets?         yang:counter64
|      +--ro rate-kbps?                   decimal64
|      +--ro rate-mbps?                   decimal64
|      +--ro rate-gbps?                   decimal64
+--ro class-maps-level-2
  +--ro class-map-level-2* [class-map-name-level-2]
    +--ro class-map-name-level-2 -> ../state/class-map-name-level-2
    +--ro state
      | +--ro class-map-name-level-2? string
      | +--ro queues
      |   +--ro queue* [id]
      |     +--ro id      uint8
      |     +--ro counters
      |       +--ro total-transmitted-packets? yang:counter64
      |       +--ro total-transmitted-octets?  yang:counter64
      |       +--ro total-dropped-packets?     yang:counter64
      |       +--ro total-dropped-octets?      yang:counter64
      |       +--ro green-transmitted-packets?  yang:counter64
      |       +--ro non-green-transmitted-packets? yang:counter64
      |       +--ro green-dropped-packets?     yang:counter64
      |       +--ro yellow-dropped-packets?    yang:counter64
      |       +--ro red-dropped-packets?       yang:counter64
      |       +--ro rate-kbps?                  decimal64
      |       +--ro rate-mbps?                  decimal64
      |       +--ro rate-gbps?                  decimal64
    +--ro class-maps-level-3
      +--ro class-map-level-3* [class-map-name-level-3]
        +--ro class-map-name-level-3 -> ../state/class-map-name-level-3
        +--ro state

```

---

```

+--ro class-map-name-level-3? string
+--ro queues
  +--ro queue* [id]
    +--ro id      uint8
    +--ro counters
      +--ro total-transmitted-packets? yang:counter64
      +--ro total-transmitted-octets?  yang:counter64
      +--ro total-dropped-packets?    yang:counter64
      +--ro total-dropped-octets?     yang:counter64
      +--ro green-transmitted-packets? yang:counter64
      +--ro non-green-transmitted-packets? yang:counter64
      +--ro green-dropped-packets?     yang:counter64
      +--ro yellow-dropped-packets?    yang:counter64
      +--ro red-dropped-packets?       yang:counter64
      +--ro rate-kbps?                 decimal64
      +--ro rate-mbps?                 decimal64
      +--ro rate-gbps?                 decimal64

```

notifications:

```

+---n qos-subinterface-default-policy-add-notification
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message? string
+---n qos-subinterface-default-policy-delete-notification
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message? string
+---n qos-subinterface-traffic-shape-add-notification
| +--ro severity? cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message? string
+---n qos-subinterface-traffic-shape-delete-notification
  +--ro severity? cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message? string

```

---

## module: ipi-qos

```

+--rw qos
  +--rw global
    +--rw config
      | +--rw enable-qos? cml-data-types:cml_enable_disable_t
    +--ro state
      | +--ro enable-qos? cml-data-types:cml_enable_disable_t
    +--rw map-profile {feature-list:HAVE_QOS_MAPPING_PROFILE}?
      | +--rw cos-to-queue-profiles
      | | +--rw cos-to-queue-profile* [name]
      | |   +--rw name          -> ../config/name
      | |   +--rw config
      | |     | +--rw name? string
      | |     +--ro state
      | |     | +--ro name? string
      | |     +--rw cos-dei-to-queues {feature-list:NOT_HAVE_CUSTOM2_QOS}?
      | |       +--rw cos-dei-to-queue* [cos-value dei-value]
      | |         +--rw cos-value  -> ../config/cos-value
      | |         +--rw dei-value  -> ../config/dei-value
      | |         +--rw config
      | |           | +--rw cos-value? uint8
      | |           | +--rw dei-value? ipi-qos-types:qos_dei_t
      | |           | +--rw queue-id  uint8
      | |           | +--rw color?   ipi-qos-types:qos_color_t
      | |           +--ro state
      | |             +--ro cos-value? uint8
      | |             +--ro dei-value? ipi-qos-types:qos_dei_t
      | |             +--ro queue-id  uint8
      | |             +--ro color?   ipi-qos-types:qos_color_t
      | +--rw dscp-to-queue-profiles
      | | +--rw dscp-to-queue-profile* [name]
      | |   +--rw name          -> ../config/name
      | |   +--rw config
      | |     | +--rw name? string

```

```

| | +--ro state
| | | +--ro name? string
| | +--rw dscp-to-queues
| |   +--rw dscp-to-queue* [dscp-value]
| |     +--rw dscp-value -> ../config/dscp-value
| |     +--rw config
| |       | +--rw dscp-value? uint8
| |       | +--rw queue-id uint8
| |       | +--rw color? ipi-qos-types:qos_color_t
| |       +--ro state
| |         +--ro dscp-value? uint8
| |         +--ro queue-id uint8
| |         +--ro color? ipi-qos-types:qos_color_t
| +--rw queue-color-to-cos-profiles
| | +--rw queue-color-to-cos-profile* [name]
| |   +--rw name -> ../config/name
| |   +--rw config
| |     | +--rw name? string
| |     +--ro state
| |     | +--ro name? string
| |     +--rw queue-color-to-coses
| |       +--rw queue-color-to-cos* [queue-id color]
| |       +--rw queue-id -> ../config/queue-id
| |       +--rw color -> ../config/color
| |       +--rw config
| |         | +--rw queue-id? uint8
| |         | +--rw color? ipi-qos-types:qos_color_key_t
| |         | +--rw cos-value uint8
| |         +--ro state
| |         +--ro queue-id? uint8
| |         +--ro color? ipi-qos-types:qos_color_key_t
| |         +--ro cos-value uint8
| +--rw queue-to-precedence-profiles {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
| | +--rw queue-to-precedence-profile* [name]
| |   +--rw name -> ../config/name
| |   +--rw config

```

---

```

| | | +--rw name? string
| | +--ro state
| | | +--ro name? string
| | +--rw queue-to-precedences
| |   +--rw queue-to-precedence* [queue-id]
| |     +--rw queue-id -> ../config/queue-id
| |     +--rw config
| |       | +--rw queue-id? uint8
| |       | +--rw precedence-value uint8
| |       +--ro state
| |         +--ro queue-id? uint8
| |         +--ro precedence-value uint8
| +--rw precedence-to-queue-profiles
| | +--rw precedence-to-queue-profile* [name]
| |   +--rw name -> ../config/name
| |   +--rw config
| |     | +--rw name? string
| |     +--ro state
| |     | +--ro name? string
| |     +--rw precedence-to-queues
| |       +--rw precedence-to-queue* [precedence-value]
| |         +--rw precedence-value -> ../config/precedence-value
| |         +--rw config
| |           | +--rw precedence-value? uint8
| |           | +--rw queue-id uint8
| |           +--ro state
| |             +--ro precedence-value? uint8
| |             +--ro queue-id uint8
| +--rw queue-color-to-dscp-profiles
|   +--rw queue-color-to-dscp-profile* [name]
|     +--rw name -> ../config/name
|     +--rw config
|       | +--rw name? string
|       +--ro state
|       | +--ro name? string
|       +--rw queue-color-to-dscps

```

---



---

```

|      +--rw queue-color-to-dscp* [queue-id color]
|      +--rw queue-id   -> ../config/queue-id
|      +--rw color      -> ../config/color
|      +--rw config
|      | +--rw queue-id?   uint8
|      | +--rw color?     ipi-qos-types:qos_color_key_t
|      | +--rw dscp-value  uint8
|      +--ro state
|      +--ro queue-id?   uint8
|      +--ro color?     ipi-qos-types:qos_color_key_t
|      +--ro dscp-value  uint8
+--rw remark
| +--rw config
| | +--rw cos?   empty
| | +--rw dei?   empty {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM3_QOS}?
| | +--rw dscp?  empty
| +--ro state
| +--ro cos?   empty
| +--ro dei?   empty {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM3_QOS}?
| +--ro dscp?  empty
+--ro class-maps-default
| +--ro class-map-default* [name]
| +--ro name   -> ../state/name
| +--ro state
| +--ro name?      string
| +--ro type?      ipi-qos-types:qos_class_map_default_t
| +--ro match-criteria? ipi-qos-types:qos_match_criteria_t
+--rw class-maps
| +--rw class-map* [name]
| +--rw name      -> ../config/name
| +--rw config
| | +--rw name?      string
| | +--rw type        ipi-qos-types:qos_class_map_t
| | +--rw match-criteria ipi-qos-types:qos_match_criteria_t
| | +--rw reference-description? cml-data-types:cml_line_t
| +--ro state

```

---

---

```

| | +--ro name?          string
| | +--ro type           ipi-qos-types:qos_class_map_t
| | +--ro match-criteria ipi-qos-types:qos_match_criteria_t
| | +--ro reference-description? cml-data-types:cml_line_t
| +--rw match-any-conditions
| | +--rw config
| | | +--rw access-control-list-name? string
| | | +--rw ethertype*          string
| | | +--rw traffic-type*       ipi-qos-types:qos_traffic_type_t
| | | +--rw cos?                cml-data-types:cml_range_t
| | | +--rw inner-cos?          cml-data-types:cml_range_t
| | | +--rw vlan?              cml-data-types:cml_range_t
| | | +--rw inner-vlan?         cml-data-types:cml_range_t
| | | +--rw rtp?               cml-data-types:cml_range_t
| | | +--rw dscp?              cml-data-types:cml_range_t
| | | +--rw precedence?         cml-data-types:cml_range_t
| | | +--rw packet-protocol*    ipi-qos-types:qos_proto_type_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--rw source-mac*         ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--rw destination-mac*    ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| | +--ro state
| | | +--ro access-control-list-name? string
| | | +--ro ethertype*          string
| | | +--ro traffic-type*       ipi-qos-types:qos_traffic_type_t
| | | +--ro cos?                cml-data-types:cml_range_t
| | | +--ro inner-cos?          cml-data-types:cml_range_t
| | | +--ro vlan?              cml-data-types:cml_range_t
| | | +--ro inner-vlan?         cml-data-types:cml_range_t
| | | +--ro rtp?               cml-data-types:cml_range_t
| | | +--ro dscp?              cml-data-types:cml_range_t
| | | +--ro precedence?         cml-data-types:cml_range_t
| | | +--ro packet-protocol*    ipi-qos-types:qos_proto_type_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--ro source-mac*         ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--ro destination-mac*    ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| | +--rw ipv4
| | | +--rw layer4-match* [protocol port-type]
| | |   +--rw protocol    -> ../config/protocol

```

---

---

```

| | | +--rw port-type -> ../config/port-type
| | | +--rw config
| | | | +--rw protocol? ipi-qos-types:qos_layer4_protocol_t
| | | | +--rw port-type? ipi-qos-types:qos_layer4_port_t
| | | | +--rw port cml-data-types:cml_range_t
| | | +--ro state
| | | | +--ro protocol? ipi-qos-types:qos_layer4_protocol_t
| | | | +--ro port-type? ipi-qos-types:qos_layer4_port_t
| | | | +--ro port cml-data-types:cml_range_t
| | +--rw ipv6
| +--rw match-all-conditions
| | +--rw config
| | | +--rw ethertype-all? string
| | | +--rw traffic-type-all? ipi-qos-types:qos_traffic_type_t
| | | +--rw cos-all? uint8
| | | +--rw inner-cos-all? uint8
| | | +--rw vlan-all? uint16
| | | +--rw inner-vlan-all? uint16
| | | +--rw rtp-all? uint32
| | | +--rw dscp-all? string
| | | +--rw precedence-all? string
| | | +--rw packet-protocol-all? ipi-qos-types:qos_proto_type_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--rw source-mac-all? ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--rw destination-mac-all? ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| | +--ro state
| | | +--ro ethertype-all? string
| | | +--ro traffic-type-all? ipi-qos-types:qos_traffic_type_t
| | | +--ro cos-all? uint8
| | | +--ro inner-cos-all? uint8
| | | +--ro vlan-all? uint16
| | | +--ro inner-vlan-all? uint16
| | | +--ro rtp-all? uint32
| | | +--ro dscp-all? string
| | | +--ro precedence-all? string
| | | +--ro packet-protocol-all? ipi-qos-types:qos_proto_type_t {feature-list:HAVE_CUSTOM1_QOS}?
| | | +--ro source-mac-all? ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?

```

---

```

| | +--ro destination-mac-all? ipi-qos-types:qos_mac_address_t {feature-list:HAVE_CUSTOM1_QOS}?
| +--rw layer4-matches-ipv4
|   +--rw layer4-match-ipv4* [protocol-all port-type-all port-all]
|     +--rw protocol-all -> ../config/protocol-all
|     +--rw port-type-all -> ../config/port-type-all
|     +--rw port-all -> ../config/port-all
|     +--rw config
|       | +--rw protocol-all? ipi-qos-types:qos_layer4_protocol_t
|       | +--rw port-type-all? ipi-qos-types:qos_layer4_port_t
|       | +--rw port-all? uint16
|       +--ro state
|         +--ro protocol-all? ipi-qos-types:qos_layer4_protocol_t
|         +--ro port-type-all? ipi-qos-types:qos_layer4_port_t
|         +--ro port-all? uint16
+--rw class-maps-queuing
| +--rw class-map-queuing* [name]
|   +--rw name -> ../config/name
|   +--rw config
|     | +--rw name? string
|     | +--rw type ipi-qos-types:qos_class_map_t
|     | +--rw reference-description? cml-data-types:cml_line_t
|     +--ro state
|       | +--ro name? string
|       | +--ro type ipi-qos-types:qos_class_map_t
|       | +--ro reference-description? cml-data-types:cml_line_t
|     +--rw match-conditions
|       +--rw config
|         | +--rw vlan-queue? uint16 {feature-list:NOT_HAVE_MARVELL}?
|         | +--rw cos? cml-data-types:cml_range_t {feature-list:HAVE_CUSTOM1_QOS}?
|         | +--rw qos-group? uint32 {feature-list:HAVE_CUSTOM1_QOS}?
|         +--ro state
|           +--ro vlan-queue? uint16 {feature-list:NOT_HAVE_MARVELL}?
|           +--ro cos? cml-data-types:cml_range_t {feature-list:HAVE_CUSTOM1_QOS}?
|           +--ro qos-group? uint32 {feature-list:HAVE_CUSTOM1_QOS}?
+--rw policy-maps
| +--rw policy-map* [policy-map-name]

```

---

```

|  +--rw policy-map-name  -> ../config/policy-map-name
|  +--rw config
|  |  +--rw policy-map-name?      string
|  |  +--rw type                  ipi-qos-types:qos_policy_map_t
|  |  +--rw reference-description? cml-data-types:cml_line_t
|  +--ro state
|  |  +--ro policy-map-name?      string
|  |  +--ro type                  ipi-qos-types:qos_policy_map_t
|  |  +--ro reference-description? cml-data-types:cml_line_t
|  +--rw classes
|  |  +--rw class* [class-map-name]
|  |  |  +--rw class-map-name  -> ../config/class-map-name
|  |  |  +--rw config
|  |  |  |  +--rw class-map-name?      ipi-qos-types:qos_policy_map_class_t
|  |  |  |  +--rw type                  ipi-qos-types:qos_policy_map_t
|  |  |  |  +--rw child-service-policy-name? -> /qos/global/policy-maps/policy-map/policy-map-name
|  |  |  |  +--rw reference-description?  cml-data-types:cml_line_t
|  |  |  +--ro state
|  |  |  |  +--ro class-map-name?      ipi-qos-types:qos_policy_map_class_t
|  |  |  |  +--ro type                  ipi-qos-types:qos_policy_map_t
|  |  |  |  +--ro child-service-policy-name? -> /qos/global/policy-maps/policy-map/policy-map-name
|  |  |  |  +--ro reference-description?  cml-data-types:cml_line_t
|  |  +--rw queue-mode
|  |  |  +--rw config
|  |  |  |  +--rw lossless?              empty {feature-list:HAVE_CUSTOM1_QOS}?
|  |  |  |  +--rw weighted-round-robin-queue-weight? uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS}?
|  |  |  |  +--rw strict-priority-enabled?      empty {feature-list:NOT_HAVE_CUSTOM2_QOS}?
|  |  |  +--ro state
|  |  |  |  +--ro lossless?              empty {feature-list:HAVE_CUSTOM1_QOS}?
|  |  |  |  +--ro weighted-round-robin-queue-weight? uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS}?
|  |  |  |  +--ro strict-priority-enabled?      empty {feature-list:NOT_HAVE_CUSTOM2_QOS}?
|  |  +--rw red
|  |  |  +--rw config
|  |  |  |  +--rw weight?  uint8
|  |  |  +--ro state
|  |  |  |  +--ro weight?  uint8

```

---

---

```

|   | | +--rw wred {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
|   | |   +--rw config
|   | |     | +--rw min-threshold?          uint32
|   | |     | +--rw threshold-unit?         ipi-qos-types:qos_threshold_t
|   | |     | +--rw max-threshold?          uint32
|   | |     | +--rw drop-probability?       uint8
|   | |     | +--rw min-threshold-yellow?   uint32
|   | |     | +--rw max-threshold-yellow?   uint32
|   | |     | +--rw drop-probability-yellow? uint8
|   | |     | +--rw min-threshold-red?      uint32
|   | |     | +--rw max-threshold-red?      uint32
|   | |     | +--rw drop-probability-red?   uint8
|   | |     | +--rw explicit-congestion-notification? empty
|   | |   +--ro state
|   | |     +--ro min-threshold?          uint32
|   | |     +--ro threshold-unit?         ipi-qos-types:qos_threshold_t
|   | |     +--ro max-threshold?          uint32
|   | |     +--ro drop-probability?       uint8
|   | |     +--ro min-threshold-yellow?   uint32
|   | |     +--ro max-threshold-yellow?   uint32
|   | |     +--ro drop-probability-yellow? uint8
|   | |     +--ro min-threshold-red?      uint32
|   | |     +--ro max-threshold-red?      uint32
|   | |     +--ro drop-probability-red?   uint8
|   | |     +--ro explicit-congestion-notification? empty
|   | +--rw tail-drops
|   | | +--rw tail-drop* [max-threshold max-threshold-type]
|   | |   +--rw max-threshold    -> ../config/max-threshold
|   | |   +--rw max-threshold-type -> ../config/max-threshold-type
|   | |   +--rw config
|   | |     | +--rw max-threshold?    uint32
|   | |     | +--rw max-threshold-type? ipi-qos-types:qos_threshold_t
|   | |   +--ro state
|   | |     +--ro max-threshold?    uint32
|   | |     +--ro max-threshold-type? ipi-qos-types:qos_threshold_t
|   | +--rw bandwidths {feature-list:NOT_HAVE_CUSTOM2_QOS}?

```

---

```

|   | | +--rw bandwidth* [rate-value rate-type]
|   | |   +--rw rate-value  -> ../config/rate-value
|   | |   +--rw rate-type   -> ../config/rate-type
|   | |   +--rw config
|   | |     | +--rw rate-value?  uint32
|   | |     | +--rw rate-type?   ipi-qos-types:qos_shape_rate_unit_extended_t
|   | |     +--ro state
|   | |       +--ro rate-value?  uint32
|   | |       +--ro rate-type?   ipi-qos-types:qos_shape_rate_unit_extended_t
|   | +--rw shapes
|   |   +--rw shape* [rate-value rate-unit]
|   |     +--rw rate-value  -> ../config/rate-value
|   |     +--rw rate-unit   -> ../config/rate-unit
|   |     +--rw config
|   |       | +--rw rate-value?  uint32
|   |       | +--rw rate-unit?   ipi-qos-types:qos_shape_rate_unit_extended_t
|   |       +--ro state
|   |         +--ro rate-value?  uint32
|   |         +--ro rate-unit?   ipi-qos-types:qos_shape_rate_unit_extended_t
|   +--rw qos-mode
|     +--rw config
|       | +--rw priority?          uint16
|       | +--rw (set-option)?
|       |   +--:(port-action)
|       |   +--:(precedence)
|       |     | +--rw precedence-remark?      string
|       |     +--:(bridge-precedence)
|       |     +--:(cos)
|       |       | +--rw cos-value?          uint8
|       |       +--:(bridge-cos)
|       |         | +--rw cos-remark-only-bridged?  uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|       |         +--:(dscp)
|       |         | +--rw dscp-value-remark?      string
|       |         +--:(bridge-dscp)
|       |         | +--rw dscp-remark-only-bridged?  string {feature-list:HAVE_CUSTOM1_QOS}?
|       |         +--:(queue)

```

```

|   |   | +--rw queue-id?          uint8
|   |   +---:(bridge-queue)
|   |   | +--rw queue-remark-only-bridged?  uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|   |   +---:(qos-group)
|   |   | +--rw qos-group?          uint16 {feature-list:HAVE_CUSTOM1_QOS}?
|   +--ro state
|   | +--ro priority?              uint16
|   | +--ro (set-option)?
|   |   +---:(port-action)
|   |   +---:(precedence)
|   |   | +--ro precedence-remark?      string
|   |   +---:(bridge-precedence)
|   |   +---:(cos)
|   |   | +--ro cos-value?             uint8
|   |   +---:(bridge-cos)
|   |   | +--ro cos-remark-only-bridged?  uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|   |   +---:(dscp)
|   |   | +--ro dscp-value-remark?      string
|   |   +---:(bridge-dscp)
|   |   | +--ro dscp-remark-only-bridged?  string {feature-list:HAVE_CUSTOM1_QOS}?
|   |   +---:(queue)
|   |   | +--ro queue-id?             uint8
|   |   +---:(bridge-queue)
|   |   | +--ro queue-remark-only-bridged?  uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|   |   +---:(qos-group)
|   |   | +--ro qos-group?            uint16 {feature-list:HAVE_CUSTOM1_QOS}?
|   +--rw police
|   | +--rw config
|   |   | +--rw type?                ipi-qos-types:qos_police_t
|   |   | +--rw cir?                 uint64
|   |   | +--rw cir-unit?            ipi-qos-types:qos_rate_unit_t
|   |   | +--rw bc?                  uint64
|   |   | +--rw bc-unit?             ipi-qos-types:qos_burst_rate_unit_t
|   |   | +--rw pir?                 uint64 {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
|   |   | +--rw pir-unit?            ipi-qos-types:qos_rate_unit_t {feature-
list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
|   |   | +--rw be?                  uint32

```



---

```

|          | +--rw be-unit?          ipi-qos-types:qos_burst_rate_unit_t
|          | +--rw set-conform-action? ipi-qos-types:qos_conform_action_t {feature-
list:HAVE_CUSTOM1_QOS}?
|          | +--rw conform-cos?      uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw conform-dscp?     uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw conform-precedence? uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw set-exceed-action? ipi-qos-types:qos_exceed_action_t {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw exceed-cos?       uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw exceed-dscp?      uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw set-violate-action? ipi-qos-types:qos_violate_action_t {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw violate-cos?      uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          | +--rw violate-dscp?     uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|          +--ro state
|              +--ro type?          ipi-qos-types:qos_police_t
|              +--ro cir?          uint64
|              +--ro cir-unit?     ipi-qos-types:qos_rate_unit_t
|              +--ro bc?          uint64
|              +--ro bc-unit?     ipi-qos-types:qos_burst_rate_unit_t
|              +--ro pir?          uint64 {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
|              +--ro pir-unit?     ipi-qos-types:qos_rate_unit_t {feature-
list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
|              +--ro be?          uint32
|              +--ro be-unit?     ipi-qos-types:qos_burst_rate_unit_t
|              +--ro set-conform-action? ipi-qos-types:qos_conform_action_t {feature-
list:HAVE_CUSTOM1_QOS}?
|              +--ro conform-cos?  uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro conform-dscp?  uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro conform-precedence? uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro set-exceed-action? ipi-qos-types:qos_exceed_action_t {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro exceed-cos?    uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro exceed-dscp?    uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro set-violate-action? ipi-qos-types:qos_violate_action_t {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro violate-cos?    uint8 {feature-list:HAVE_CUSTOM1_QOS}?
|              +--ro violate-dscp?    uint8 {feature-list:HAVE_CUSTOM1_QOS}?
+--rw scheduler-mode {feature-list:HAVE_CUSTOM1_QOS_OR_HAVE_CUSTOM4_QOS}?
| +--rw weighted-round-robins
| | +--rw weighted-round-robin* [unicast-queue-weight non-unicast-queue-weight]

```

---

```

| | +--rw unicast-queue-weight    -> ../config/unicast-queue-weight
| | +--rw non-unicast-queue-weight -> ../config/non-unicast-queue-weight
| | +--rw config
| | | +--rw unicast-queue-weight?  uint8
| | | +--rw non-unicast-queue-weight? uint8
| | +--ro state
| |   +--ro unicast-queue-weight?  uint8
| |   +--ro non-unicast-queue-weight? uint8
| +--rw strict-priority
|   +--rw config
|   | +--rw enabled?  empty
|   +--ro state
|   | +--ro enabled?  empty
+--rw statistics
| +--rw config
| | +--rw enabled?  empty
| +--ro state
|   +--ro enabled?  empty
+--rw red-drop
| +--rw config
| +--ro state
+--rw vlan-queuing
  +--rw config
  | +--rw block-size?  uint8 {feature-list:HAVE_FLEXPORT,feature-list:HAVE_CUSTOM1_QOS}?
  +--ro state
    +--ro block-size?  uint8 {feature-list:HAVE_FLEXPORT,feature-list:HAVE_CUSTOM1_QOS}?

```

rpcs:

```

+---x qos-clear-statistics {feature-list:HAVE_QOS}?
+---w input
  +---w interface-name?  string
  +---w type?             ipi-qos-types:qos_clear_stats_t

```

---

## module: ipi-radius

```

+--rw radius
  +--rw vrfs
    | +--rw vrf* [vrf-name] {feature-list:HAVE_AAA}?
    |   +--rw vrf-name      -> ../config/vrf-name
    |   +--rw config
    |     | +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    |     | +--rw key-type?      ipi-radius-types:radius_hostp_key_type_t
    |     | +--rw secret-key-string? string
    |     | +--rw timeout?      uint8
    |     +--ro state
    |       | +--ro vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    |       | +--ro key-type?      ipi-radius-types:radius_hostp_key_type_t
    |       | +--ro secret-key-string? string
    |       | +--ro timeout?      uint8
    |     +--rw remote-servers
    |       +--rw server* [host-address] {feature-list:HAVE_AAA}?
    |         +--rw host-address -> ../config/host-address
    |         +--rw config
    |           | +--rw host-address?      cml-data-types:cml_hostname_t
    |           | +--rw sequence-number    uint8
    |           | +--rw key-type?          ipi-radius-types:radius_hostp_key_type_t
    |           | +--rw secret-key-string? string
    |           | +--rw accounting-port?   uint16
    |           | +--rw authentication-port? uint16
    |           | +--rw timeout?          uint8
    |           +--ro state
    |             +--ro host-address?      cml-data-types:cml_hostname_t
    |             +--ro sequence-number    uint8
    |             +--ro key-type?          ipi-radius-types:radius_hostp_key_type_t
    |             +--ro secret-key-string? string
    |             +--ro accounting-port?   uint16
    |             +--ro authentication-port? uint16
    |             +--ro timeout?          uint8
    |             +--ro last-successful-authentication-time? yang:date-and-time

```

```

|         +--ro counters
|         +--ro successful-authentications?  yang:counter64
|         +--ro authentication-failures?    yang:counter64
|         +--ro connection-failures?       yang:counter64
+--rw debug
  +--rw config
    | +--rw enable?  empty
  +--ro state
    +--ro enable?          empty
    +--ro terminal-debug-status?  cml-data-types:cml_on_off_t

```

rpcs:

```

+---x radius-clear-all-server-counters {feature-list:HAVE_HOSTPD,feature-list:HAVE_RADIUS_CLIENT}?
| +---w input
|   +---w vrf-name  string
+---x radius-clear-server-counters {feature-list:HAVE_HOSTPD,feature-list:HAVE_RADIUS_CLIENT}?
| +---w input
|   +---w hostname  cml-data-types:cml_hostname_t
|   +---w vrf-name  string
+---x radius-terminal-debug-on {feature-list:HAVE_HOSTPD,feature-list:HAVE_RADIUS_CLIENT}?
+---x radius-terminal-debug-off {feature-list:HAVE_HOSTPD,feature-list:HAVE_RADIUS_CLIENT}?

```

---

## module: ipi-ras

rpcs:

```

+---x platform-clear-hsl-ipc-stat-values {feature-list:HAVE_HAL,feature-list:HAVE_PLATFORM_RAS}?
| +---w input
|   +---w start-value  uint16
|   +---w end-value    uint16
+---x platform-clear-hsl-ipc-stat {feature-list:HAVE_HAL,feature-list:HAVE_PLATFORM_RAS}?
+---x platform-clear-hsl-mlag-mac-sync {feature-list:HAVE_MLAG}?
+---x platform-clear-hardware-discard-counters {feature-list:HAVE_HAL,feature-list:HAVE_PLATFORM_RAS}?
+---x platform-clear-hsl-fdb-debug-counters {feature-list:HAVE_HAL,feature-list:HAVE_PLATFORM_RAS}?
+---x platform-clear-hsl-system-cpu-stats {feature-list:HAVE_HAL,feature-list:HAVE_PLATFORM_RAS}?

```

---

## module: ipi-rib-vrf

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-vrf:vrf:

```

+--rw global
  +--rw config
    | +--rw ipv4-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
    | +--rw ipv6-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD,feature-list:HAVE_IPV6}?
    +--ro state
      +--ro ipv4-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
      +--ro ipv6-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD,feature-list:HAVE_IPV6}?

```

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-vrf:vrf:

```

+--rw static-routes
  +--rw ipv4
    | +--rw gateway-interface-routes-global
    | | +--rw gateway-interface-route-global* [destination-prefix interface-name enable-global-table-lookup]
    | |   +--rw destination-prefix      -> ../config/destination-prefix
    | |   +--rw interface-name          -> ../config/interface-name
    | |   +--rw enable-global-table-lookup -> ../config/enable-global-table-lookup
    | |   +--rw config
    | |     | +--rw destination-prefix?      cml-data-types:cml_ipv4_prefix_t
    | |     | +--rw interface-name?          string
    | |     | +--rw enable-global-table-lookup? empty
    | |     | +--rw track-id?                uint16 {feature-list:HAVE_OBJ_TRACKING}?
    | |     +--ro state
    | |       +--ro destination-prefix?      cml-data-types:cml_ipv4_prefix_t
    | |       +--ro interface-name?          string
    | |       +--ro enable-global-table-lookup? empty
    | |       +--ro track-id?                uint16 {feature-list:HAVE_OBJ_TRACKING}?
    | +--rw routes
    | | +--rw route* [destination-prefix gateway-address]
    | |   +--rw destination-prefix      -> ../config/destination-prefix
    | |   +--rw gateway-address         -> ../config/gateway-address
    | |   +--rw config

```

---

```

| | | +--rw bfd-state?      ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
| | | +--rw destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | | +--rw gateway-address?  inet:ipv4-address
| | +--ro state
| | | +--ro bfd-state?      ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
| | | +--ro destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | | +--ro gateway-address?  inet:ipv4-address
| | +--rw gateway-interface-routes
| | | +--rw gateway-interface-route* [interface-name]
| | |   +--rw interface-name  -> ../config/interface-name
| | |   +--rw config
| | |     | +--rw distance?    uint32
| | |     | +--rw tag?        uint32
| | |     | +--rw track-id?    uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | |     | +--rw description? cml-data-types:cml_line_t
| | |     | +--rw interface-name? string
| | |     +--ro state
| | |       +--ro distance?    uint32
| | |       +--ro tag?        uint32
| | |       +--ro track-id?    uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | |       +--ro description? cml-data-types:cml_line_t
| | |       +--ro interface-name? string
| | +--rw interface-routes-global
| |   +--rw interface-route-global* [interface-name enable-global-table-lookup]
| |   +--rw interface-name          -> ../config/interface-name
| |   +--rw enable-global-table-lookup -> ../config/enable-global-table-lookup
| |   +--rw config
| |     | +--rw interface-name?      string
| |     | +--rw enable-global-table-lookup? empty
| |     | +--rw track-id?            uint16 {feature-list:HAVE_OBJ_TRACKING}?
| |     +--ro state
| |       +--ro interface-name?      string
| |       +--ro enable-global-table-lookup? empty
| |       +--ro track-id?            uint16 {feature-list:HAVE_OBJ_TRACKING}?
| +--rw interface-routes
| | +--rw interface-route* [destination-prefix interface-name]

```

---

---

```

| | +--rw destination-prefix -> ../config/destination-prefix
| | +--rw interface-name    -> ../config/interface-name
| | +--rw config
| | | +--rw destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | | +--rw interface-name?    string
| | | +--rw distance?          uint32
| | | +--rw tag?               uint32
| | | +--rw track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | | +--rw description?       cml-data-types:cml_line_t
| | +--ro state
| |   +--ro destination-prefix? cml-data-types:cml_ipv4_prefix_t
| |   +--ro interface-name?    string
| |   +--ro distance?          uint32
| |   +--ro tag?               uint32
| |   +--ro track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
| |   +--ro description?       cml-data-types:cml_line_t
| +--rw multicast-routes
|   +--rw multicast-route* [source-prefix protocol-type]
|     +--rw source-prefix -> ../config/source-prefix
|     +--rw protocol-type -> ../config/protocol-type
|     +--rw config
|     | +--rw source-prefix? cml-data-types:cml_ipv4_prefix_t
|     | +--rw protocol-type? ipi-rib-types:rib_mroute_route_type_t
|     | +--rw gateway-address inet:ipv4-address
|     | +--rw distance?      uint32
|     +--ro state
|       +--ro source-prefix? cml-data-types:cml_ipv4_prefix_t
|       +--ro protocol-type? ipi-rib-types:rib_mroute_route_type_t
|       +--ro gateway-address inet:ipv4-address
|       +--ro distance?      uint32
+--rw ipv6 {feature-list:HAVE_IPV6}?
  +--rw interface-routes-global
  | +--rw interface-route-global* [destination-prefix interface-name enable-ipv6-global-table-lookup]
  |   +--rw destination-prefix -> ../config/destination-prefix
  |   +--rw interface-name     -> ../config/interface-name
  |   +--rw enable-ipv6-global-table-lookup -> ../config/enable-ipv6-global-table-lookup

```

---

---

```

|   +--rw config
|   |   +--rw destination-prefix?          cml-data-types:cml_ipv6_prefix_t
|   |   +--rw interface-name?              string
|   |   +--rw enable-ipv6-global-table-lookup? empty
|   |   +--rw track-id?                    uint16 {feature-list:HAVE_OBJ_TRACKING}?
|   +--ro state
|   |   +--ro destination-prefix?          cml-data-types:cml_ipv6_prefix_t
|   |   +--ro interface-name?              string
|   |   +--ro enable-ipv6-global-table-lookup? empty
|   |   +--ro track-id?                    uint16 {feature-list:HAVE_OBJ_TRACKING}?
+--rw gateway-interface-routes-global
| +--rw gateway-interface-route-global* [destination-prefix gateway-address interface-name enable-ipv6-global-
table-lookup]
|   +--rw destination-prefix                -> ../config/destination-prefix
|   +--rw gateway-address                  -> ../config/gateway-address
|   +--rw interface-name                   -> ../config/interface-name
|   +--rw enable-ipv6-global-table-lookup -> ../config/enable-ipv6-global-table-lookup
|   +--rw config
|   |   +--rw destination-prefix?          cml-data-types:cml_ipv6_prefix_t
|   |   +--rw gateway-address?             inet:ipv6-address
|   |   +--rw interface-name?              string
|   |   +--rw enable-ipv6-global-table-lookup? empty
|   |   +--rw track-id?                    uint16 {feature-list:HAVE_OBJ_TRACKING}?
|   +--ro state
|   |   +--ro destination-prefix?          cml-data-types:cml_ipv6_prefix_t
|   |   +--ro gateway-address?             inet:ipv6-address
|   |   +--ro interface-name?              string
|   |   +--ro enable-ipv6-global-table-lookup? empty
|   |   +--ro track-id?                    uint16 {feature-list:HAVE_OBJ_TRACKING}?
+--rw routes
| +--rw route* [destination-prefix gateway-address]
|   +--rw destination-prefix -> ../config/destination-prefix
|   +--rw gateway-address   -> ../config/gateway-address
|   +--rw config
|   |   +--rw bfd-state?          ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
|   |   +--rw destination-prefix? cml-data-types:cml_ipv6_prefix_t
|   |   +--rw gateway-address?    inet:ipv6-address

```

---



---

```

| | +--rw enable-ipv6-global-table-lookup? empty
| +--ro state
| | +--ro bfd-state?          ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
| | +--ro destination-prefix?    cml-data-types:cml_ipv6_prefix_t
| | +--ro gateway-address?       inet:ipv6-address
| | +--ro enable-ipv6-global-table-lookup? empty
| +--rw out-interfaces
|   +--rw out-interface* [interface-name]
|     +--rw interface-name  -> ../config/interface-name
|     +--rw config
|       | +--rw interface-name? string
|       | +--rw track-id?      uint16 {feature-list:HAVE_OBJ_TRACKING}?
|       | +--rw description?    cml-data-types:cml_line_t
|       +--ro state
|         +--ro interface-name? string
|         +--ro track-id?      uint16 {feature-list:HAVE_OBJ_TRACKING}?
|         +--ro description?    cml-data-types:cml_line_t
+--rw interface-routes
| +--rw interface-route* [destination-prefix interface-name]
|   +--rw destination-prefix  -> ../config/destination-prefix
|   +--rw interface-name      -> ../config/interface-name
|   +--rw config
|     | +--rw destination-prefix? cml-data-types:cml_ipv6_prefix_t
|     | +--rw interface-name?     string
|     | +--rw track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
|     | +--rw description?        cml-data-types:cml_line_t
|     +--ro state
|       +--ro destination-prefix? cml-data-types:cml_ipv6_prefix_t
|       +--ro interface-name?     string
|       +--ro track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
|       +--ro description?        cml-data-types:cml_line_t
+--rw multicast-routes
  +--rw multicast-route* [source-prefix protocol-type]
    +--rw source-prefix  -> ../config/source-prefix
    +--rw protocol-type  -> ../config/protocol-type
    +--rw config

```

---

```

| +--rw source-prefix? cml-data-types:cml_ipv6_prefix_t
| +--rw protocol-type? ipi-rib-types:rib_mroute_ipv6_route_type_t
+--ro state
| +--ro source-prefix? cml-data-types:cml_ipv6_prefix_t
| +--ro protocol-type? ipi-rib-types:rib_mroute_ipv6_route_type_t
+--rw nexthop
  +--rw config!
    | +--rw gateway-mroute inet:ipv6-address
    | +--rw distance?      uint32
    +--ro state
      +--ro gateway-mroute inet:ipv6-address
      +--ro distance?      uint32

```

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-vrf:vrf:

```

+--ro ribs
  +--ro ipv4
    | +--ro ecmp-path-summary* [path-count]
    | | +--ro path-count -> ../state/path-count
    | | +--ro state
    | | +--ro counters
    | | | +--ro number-of-routes? yang:counter32
    | | +--ro path-count? uint32
    | +--ro protocol-rib-summary* [protocol-type]
    | | +--ro protocol-type -> ../state/protocol-type
    | | +--ro state
    | | +--ro counters
    | | | +--ro number-of-routes? yang:counter32
    | | +--ro protocol-type? ipi-rib-types:rib_route_type_t
    | +--ro routes
    | | +--ro route* [destination-prefix protocol-type]
    | | | +--ro destination-prefix -> ../state/destination-prefix
    | | | +--ro protocol-type -> ../state/protocol-type
    | | | +--ro next-hop* [gateway-address]
    | | | | +--ro gateway-address -> ../state/gateway-address
    | | | | +--ro state
    | | | | +--ro gateway-address?      string
    | | | | +--ro recursive-hop*        string

```

---

```

| | | +--ro interface-name?      string
| | | +--ro active?              empty
| | | +--ro fib-installed?       empty
| | | +--ro object-tracking-reachability? ipi-rib-types:rib_object_tracking_reachability_status_t {feature-
list:HAVE_OBJ_TRACKING}?
| | +--ro state
| | +--ro destination-prefix?    cml-data-types:cml_ipv4_prefix_t
| | +--ro protocol-type?        ipi-rib-types:rib_route_type_t
| | +--ro sub-type?              ipi-rib-types:rib_route_sub_type_t
| | +--ro distance?              uint8
| | +--ro metric?                uint32
| | +--ro black-hole?            empty
| | +--ro up-time?               string
| | +--ro selected?              empty
| | +--ro stale?                 empty
| +--ro state
| +--ro gateway-last-resort?     string
+--ro state
+--ro counters
+--ro total-routes?              yang:counter32
+--ro total-paths?               yang:counter32
+--ro total-routes-in-fib?       yang:counter32
+--ro ecmp-routes?               yang:counter32
+--ro ecmp-paths?                yang:counter32
+--ro ipv6 {feature-list:HAVE_IPV6}?
+--ro ecmp-path-summary* [path-count]
| +--ro path-count -> ../state/path-count
| +--ro state
| +--ro counters
| | +--ro number-of-routes?      yang:counter32
| +--ro path-count?              uint32
+--ro protocol-rib-summary* [protocol-type]
| +--ro protocol-type -> ../state/protocol-type
| +--ro state
| +--ro counters
| | +--ro number-of-routes?      yang:counter32
| +--ro protocol-type?          ipi-rib-types:rib_route_type_t

```

---

```

+--ro routes
| +--ro route* [destination-prefix protocol-type]
|   +--ro destination-prefix  -> ../state/destination-prefix
|   +--ro protocol-type       -> ../state/protocol-type
|   +--ro next-hop* [gateway-address]
|     | +--ro gateway-address  -> ../state/gateway-address
|     | +--ro state
|     |   +--ro gateway-address?      string
|     |   +--ro recursive-hop*        string
|     |   +--ro interface-name?       string
|     |   +--ro active?               empty
|     |   +--ro fib-installed?        empty
|     |   +--ro object-tracking-reachability? ipi-rib-types:rib_object_tracking_reachability_status_t {feature-
list:HAVE_OBJ_TRACKING}?
|     +--ro state
|       +--ro destination-prefix? cml-data-types:cml_ipv6_prefix_t
|       +--ro protocol-type?      ipi-rib-types:rib_route_type_t
|       +--ro sub-type?           ipi-rib-types:rib_route_sub_type_t
|       +--ro distance?          uint8
|       +--ro metric?            uint32
|       +--ro black-hole?        empty
|       +--ro up-time?           string
|       +--ro selected?          empty
|       +--ro stale?             empty
+--ro state
+--ro counters
  +--ro total-routes?      yang:counter32
  +--ro total-paths?      yang:counter32
  +--ro total-routes-in-fib? yang:counter32
  +--ro ecmp-routes?      yang:counter32
  +--ro ecmp-paths?       yang:counter32

rpcs:
+---x clear-ip-vrf-route-all {feature-list:HAVE_VRF}?
| +---w input
|   +---w vrf-name  string
+---x clear-ip-vrf-route {feature-list:HAVE_VRF}?

```

```

| +---w input
|   +---w vrf-name      string
|   +---w prefix-address  cml-data-types:cml_ipv4_prefix_t
+---x clear-ipv6-vrf-route-all {feature-list:HAVE_VRF,feature-list:HAVE_IPV6}?
| +---w input
|   +---w vrf-name      string
+---x clear-ipv6-vrf-route {feature-list:HAVE_VRF,feature-list:HAVE_IPV6}?
  +---w input
    +---w vrf-name      string
    +---w prefix-ipv6-address  cml-data-types:cml_ipv6_prefix_t

```

---

## module: ipi-rib

```

+--rw routing
  +--rw global
    | +--rw config
    | | +--rw ipv4-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
    | | +--rw ipv6-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD,feature-list:HAVE_IPV6}?
    | | +--rw fib-retain? ipi-rib-types:rib_fib_retain_t {feature-list:HAVE_L3}?
    | | +--rw max-ecmp-paths? uint8 {feature-list:HAVE_MULTIPATH}?
    | | +--rw max-static-routes? uint32
    | | +--rw max-fib-routes? uint32
    | +--ro state
    | +--ro ipv4-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD}?
    | +--ro ipv6-enable-bfd-all-interfaces? empty {feature-list:HAVE_BFD,feature-list:HAVE_IPV6}?
    | +--ro fib-retain? ipi-rib-types:rib_fib_retain_t {feature-list:HAVE_L3}?
    | +--ro max-ecmp-paths? uint8 {feature-list:HAVE_MULTIPATH}?
    | +--ro max-static-routes? uint32
    | +--ro max-fib-routes? uint32
  +--rw debug
    | +--rw config
    | | +--rw rib-options? ipi-rib-types:rib_conf_debug_t
    | | +--rw ipv4-routing-options? ipi-rib-types:rib_debug_routing_t
    | | +--rw ipv6-routing-options? ipi-rib-types:rib_debug_routing_t
    | +--ro state
    | +--ro terminal-debug-status

```

---

```

| | +--ro rib-options?      ipi-rib-types:rib_debug_t
| | +--ro ip-routing-options? ipi-rib-types:rib_debug_routing_t
| | +--ro ipv6-routing-options? ipi-rib-types:rib_debug_routing_t
| +--ro rib-options?      ipi-rib-types:rib_conf_debug_t
| +--ro ipv4-routing-options? ipi-rib-types:rib_debug_routing_t
| +--ro ipv6-routing-options? ipi-rib-types:rib_debug_routing_t
+--rw static-routes
| +--rw ipv4
| | +--rw route-vrfs
| | | +--rw route-vrf* [destination-prefix gateway-address interface-name]
| | |   +--rw destination-prefix -> ../config/destination-prefix
| | |   +--rw gateway-address    -> ../config/gateway-address
| | |   +--rw interface-name     -> ../config/interface-name
| | |   +--rw config
| | |     | +--rw destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | |     | +--rw gateway-address?   inet:ipv4-address
| | |     | +--rw interface-name?   string
| | |     +--ro state
| | |       +--ro destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | |       +--ro gateway-address?   inet:ipv4-address
| | |       +--ro interface-name?   string
| | +--rw routes
| | | +--rw route* [destination-prefix gateway-address]
| | |   +--rw destination-prefix -> ../config/destination-prefix
| | |   +--rw gateway-address    -> ../config/gateway-address
| | |   +--rw config
| | |     | +--rw bfd-state?      ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
| | |     | +--rw destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | |     | +--rw gateway-address?   inet:ipv4-address
| | |     | +--rw distance?         uint32
| | |     | +--rw tag?              uint32
| | |     | +--rw track-id?         uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | |     | +--rw description?      cml-data-types:cml_line_t
| | |     +--ro state
| | |       +--ro bfd-state?      ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
| | |       +--ro destination-prefix? cml-data-types:cml_ipv4_prefix_t

```

---

---

```

| | |   +--ro gateway-address?   inet:ipv4-address
| | |   +--ro distance?          uint32
| | |   +--ro tag?               uint32
| | |   +--ro track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | |   +--ro description?       cml-data-types:cml_line_t
| | +--rw interface-routes
| | | +--rw interface-route* [destination-prefix interface-name]
| | |   +--rw destination-prefix -> ../config/destination-prefix
| | |   +--rw interface-name     -> ../config/interface-name
| | |   +--rw config
| | | | +--rw destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | | | +--rw interface-name?     string
| | | | +--rw distance?           uint32
| | | | +--rw tag?               uint32
| | | | +--rw track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | | | +--rw description?       cml-data-types:cml_line_t
| | | +--ro state
| | |   +--ro destination-prefix? cml-data-types:cml_ipv4_prefix_t
| | |   +--ro interface-name?     string
| | |   +--ro distance?           uint32
| | |   +--ro tag?               uint32
| | |   +--ro track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
| | |   +--ro description?       cml-data-types:cml_line_t
| | +--rw multicast-routes
| | | +--rw multicast-route* [source-prefix protocol-type]
| | |   +--rw source-prefix -> ../config/source-prefix
| | |   +--rw protocol-type -> ../config/protocol-type
| | |   +--rw config
| | | | +--rw source-prefix?   cml-data-types:cml_ipv4_prefix_t
| | | | +--rw protocol-type?   ipi-rib-types:rib_mroute_route_type_t
| | | | +--rw gateway-address  inet:ipv4-address
| | | | +--rw distance?       uint32
| | | +--ro state
| | |   +--ro source-prefix?   cml-data-types:cml_ipv4_prefix_t
| | |   +--ro protocol-type?   ipi-rib-types:rib_mroute_route_type_t
| | |   +--ro gateway-address  inet:ipv4-address

```

---

---

```

| |      +--ro distance?      uint32
| +--rw ipv6 {feature-list:HAVE_IPV6}?
|   +--rw routes
|     +--rw route* [destination-prefix gateway-address]
|       +--rw destination-prefix -> ../config/destination-prefix
|       +--rw gateway-address    -> ../config/gateway-address
|       +--rw config
|         +--rw bfd-state?      ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
|         +--rw destination-prefix? cml-data-types:cml_ipv6_prefix_t
|         +--rw gateway-address?  inet:ipv6-address
|         +--rw distance?        uint32
|         +--rw track-id?        uint16 {feature-list:HAVE_OBJ_TRACKING}?
|         +--rw description?     cml-data-types:cml_line_t
|         +--ro state
|           +--ro bfd-state?      ipi-rib-types:rib_static_bfd_enable_disable_t {feature-list:HAVE_BFD}?
|           +--ro destination-prefix? cml-data-types:cml_ipv6_prefix_t
|           +--ro gateway-address?  inet:ipv6-address
|           +--ro distance?        uint32
|           +--ro track-id?        uint16 {feature-list:HAVE_OBJ_TRACKING}?
|           +--ro description?     cml-data-types:cml_line_t
| +--rw interface-routes
|   +--rw interface-route* [destination-prefix interface-name]
|     +--rw destination-prefix -> ../config/destination-prefix
|     +--rw interface-name     -> ../config/interface-name
|     +--rw config
|       +--rw destination-prefix? cml-data-types:cml_ipv6_prefix_t
|       +--rw interface-name?     string
|       +--rw distance?          uint32
|       +--rw track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
|       +--rw description?       cml-data-types:cml_line_t
|       +--ro state
|         +--ro destination-prefix? cml-data-types:cml_ipv6_prefix_t
|         +--ro interface-name?     string
|         +--ro distance?          uint32
|         +--ro track-id?          uint16 {feature-list:HAVE_OBJ_TRACKING}?
|         +--ro description?       cml-data-types:cml_line_t

```

---



---

```

|   +--rw gateway-interface-routes
|   |   +--rw gateway-interface-route* [destination-prefix gateway-address interface-name]
|   |   |   +--rw destination-prefix  -> ../config/destination-prefix
|   |   |   +--rw gateway-address      -> ../config/gateway-address
|   |   |   +--rw interface-name       -> ../config/interface-name
|   |   |   +--rw config
|   |   |   |   +--rw destination-prefix?  cml-data-types:cml_ipv6_prefix_t
|   |   |   |   +--rw gateway-address?    inet:ipv6-address
|   |   |   |   +--rw interface-name?     string
|   |   |   |   +--rw distance?           uint32
|   |   |   |   +--rw track-id?           uint16 {feature-list:HAVE_OBJ_TRACKING}?
|   |   |   |   +--rw description?       cml-data-types:cml_line_t
|   |   |   +--ro state
|   |   |   |   +--ro destination-prefix?  cml-data-types:cml_ipv6_prefix_t
|   |   |   |   +--ro gateway-address?    inet:ipv6-address
|   |   |   |   +--ro interface-name?     string
|   |   |   |   +--ro distance?           uint32
|   |   |   |   +--ro track-id?           uint16 {feature-list:HAVE_OBJ_TRACKING}?
|   |   |   |   +--ro description?       cml-data-types:cml_line_t
|   +--rw multicast-routes
|   |   +--rw multicast-route* [source-prefix protocol-type]
|   |   |   +--rw source-prefix  -> ../config/source-prefix
|   |   |   +--rw protocol-type  -> ../config/protocol-type
|   |   |   +--rw config
|   |   |   |   +--rw source-prefix?  cml-data-types:cml_ipv6_prefix_t
|   |   |   |   +--rw protocol-type?  ipi-rib-types:rib_mroute_ipv6_route_type_t
|   |   |   +--ro state
|   |   |   |   +--ro source-prefix?  cml-data-types:cml_ipv6_prefix_t
|   |   |   |   +--ro protocol-type?  ipi-rib-types:rib_mroute_ipv6_route_type_t
|   |   +--rw nexthop
|   |   |   +--rw config!
|   |   |   |   +--rw gateway-mroute  inet:ipv6-address
|   |   |   |   +--rw distance?       uint32
|   |   |   +--ro state
|   |   |   |   +--ro gateway-mroute  inet:ipv6-address
|   |   |   |   +--ro distance?       uint32

```

---

```

+--rw interfaces
  +--rw interface* [name] {feature-list:HAVE_BFD}?
    +--rw name    -> ../config/name
    +--rw config
      | +--rw name? -> /ipi-interface:interfaces/interface/name
    +--rw state
      | +--rw name? -> /ipi-interface:interfaces/interface/name
    +--rw bfd {feature-list:HAVE_BFD}?
      +--rw config
        | +--rw ipv4-enable-bfd? ipi-rib-types:rib_bfd_state {feature-list:HAVE_BFD}?
        | +--rw ipv6-enable-bfd? ipi-rib-types:rib_bfd_state {feature-list:HAVE_BFD,feature-list:HAVE_IPV6}?
      +--ro state
        +--ro ipv4-enable-bfd? ipi-rib-types:rib_bfd_state {feature-list:HAVE_BFD}?
        +--ro ipv6-enable-bfd? ipi-rib-types:rib_bfd_state {feature-list:HAVE_BFD,feature-list:HAVE_IPV6}?

```

rpcs:

```

+---x rib-snmp-restart {feature-list:HAVE_SNMP}?
+---x clear-ip-stale-kernel-routes {feature-list:HAVE_RIBD}?
+---x clear-ipv6-stale-kernel-routes {feature-list:HAVE_IPV6}?
+---x clear-ip-route-all {feature-list:HAVE_RIBD}?
+---x clear-ip-route {feature-list:HAVE_RIBD}?
| +---w input
|   +---w prefix-address  cml-data-types:cml_ipv4_prefix_t
+---x clear-ipv6-route-all {feature-list:HAVE_IPV6}?
+---x clear-ipv6-route {feature-list:HAVE_IPV6}?
| +---w input
|   +---w prefix-ipv6-address  cml-data-types:cml_ipv6_prefix_t
+---x rib-terminal-debug-on {feature-list:HAVE_RIBD}?
| +---w input
|   +---w terminal-debug-options  ipi-rib-types:rib_debug_t
+---x rib-terminal-debug-off {feature-list:HAVE_RIBD}?
| +---w input
|   +---w terminal-debug-options  ipi-rib-types:rib_debug_t
+---x rib-terminal-debug-ipv4-routing-on {feature-list:HAVE_RIBD}?
| +---w input
|   +---w terminal-debug-options  ipi-rib-types:rib_debug_routing_t

```

```

+---x rib-terminal-debug-ipv4-routing-off {feature-list:HAVE_RIBD}?
| +---w input
|   +---w terminal-debug-options   ipi-rib-types:rib_debug_routing_t
+---x rib-terminal-debug-ipv6-routing-on {feature-list:HAVE_IPV6}?
| +---w input
|   +---w terminal-debug-options   ipi-rib-types:rib_debug_routing_t
+---x rib-terminal-debug-ipv6-routing-off {feature-list:HAVE_IPV6}?
    +---w input
        +---w terminal-debug-options   ipi-rib-types:rib_debug_routing_t

```

---

## module: ipi-rip

```

+--rw rip
|   +--rw global
|   |   +--rw config
|   |   |   +--ro state
|   |   +--rw debug
|   |   |   +--rw config
|   |   |   |   +--rw options?   ipi-rip-types:rip_debug_t
|   |   |   |   +--ro state
|   |   |   |   |   +--ro options?       ipi-rip-types:rip_debug_t
|   |   |   |   |   +--ro terminal-debug-status? ipi-rip-types:rip_debug_t
|   +--rw interfaces
|   |   +--rw interface* [name]
|   |   |   +--rw name    -> ../config/name
|   |   |   +--rw config
|   |   |   |   +--rw name?          -> /ipi-interface:interfaces/interface/name
|   |   |   |   +--rw disable-receive-packet? empty
|   |   |   |   +--rw disable-send-packet?   empty
|   |   |   |   +--rw receive-version?      ipi-rip-types:rip_version_t
|   |   |   |   +--rw send-version?         ipi-rip-types:rip_version_t
|   |   |   |   +--rw auth-mode?           ipi-rip-types:rip_auth_mode_t
|   |   |   |   +--rw auth-string?         cml-data-types:cml_line_t

```

---

```

| | +--rw auth-keychain?      string
| | +--rw split-horizon?      boolean
| +--ro state
|   +--ro name?               -> /ipi-interface:interfaces/interface/name
|   +--ro disable-receive-packet? empty
|   +--ro disable-send-packet? empty
|   +--ro receive-version?     ipi-rip-types:rip_version_t
|   +--ro send-version?        ipi-rip-types:rip_version_t
|   +--ro auth-mode?           ipi-rip-types:rip_auth_mode_t
|   +--ro auth-string?         cml-data-types:cml_line_t
|   +--ro auth-keychain?       string
|   +--ro split-horizon?       boolean
|   +--ro statistics
|     +--ro sent-mcast-updates? yang:counter32
|     +--ro sent-mcast-requests? yang:counter32
|     +--ro sent-unicast-updates? yang:counter32
|     +--ro sent-unicast-requests? yang:counter32
|     +--ro received-mcast-updates? yang:counter32
|     +--ro received-mcast-requests? yang:counter32
|     +--ro received-unicast-updates? yang:counter32
|     +--ro received-unicast-requests? yang:counter32
|     +--ro received-bad-packets? yang:counter32
|     +--ro received-bad-routes? yang:counter32
+--rw instance
  +--rw config!
    | +--rw enable-cisco-metric-behavior? cml-data-types:cml_enable_disable_t
    | +--rw default-metric?               uint8
    | +--rw version?                     uint8
    | +--rw distance?                   uint8
    | +--rw network-interfaces*           -> /ipi-interface:interfaces/interface/name
    | +--rw network-routes*              cml-data-types:cml_ipv4_prefix_t
    | +--rw rip-enabled                   empty
    | +--rw bfd-enable?                   empty {feature-list:HAVE_BFD}?
    | +--rw receive-buffer-size?          uint32
    | +--rw passive-interfaces*           -> /ipi-interface:interfaces/interface/name
    | +--rw static-routes*               cml-data-types:cml_ipv4_prefix_t

```

---

---

```

| +--rw neighbors*          inet:ipv4-address
| +--rw neighbor-fall-over-bfd*  inet:ipv4-address {feature-list:HAVE_BFD}?
+--ro state
| +--ro enable-cisco-metric-behavior?  cml-data-types:cml_enable_disable_t
| +--ro default-metric?                uint8
| +--ro version?                      uint8
| +--ro distance?                    uint8
| +--ro network-interfaces*           -> /ipi-interface:interfaces/interface/name
| +--ro network-routes*              cml-data-types:cml_ipv4_prefix_t
| +--ro rip-enabled                  empty
| +--ro bfd-enable?                  empty {feature-list:HAVE_BFD}?
| +--ro receive-buffer-size?         uint32
| +--ro passive-interfaces*          -> /ipi-interface:interfaces/interface/name
| +--ro static-routes*              cml-data-types:cml_ipv4_prefix_t
| +--ro neighbors*                  inet:ipv4-address
| +--ro neighbor-fall-over-bfd*      inet:ipv4-address {feature-list:HAVE_BFD}?
+--rw distances
| +--rw distance* [source-prefix]
|   +--rw source-prefix  -> ../config/source-prefix
|   +--rw config
|     | +--rw source-prefix?  cml-data-types:cml_ipv4_prefix_t
|     | +--rw distance      uint8
|     | +--rw access-list-name?  string
|     +--ro state
|       +--ro source-prefix?  cml-data-types:cml_ipv4_prefix_t
|       +--ro distance      uint8
|       +--ro access-list-name?  string
+--rw timers
| +--rw config!
| | +--rw route-table-update-interval  uint32
| | +--rw route-info-timeout-interval  uint32
| | +--rw garbage-collection-interval  uint32
| +--ro state
|   +--ro route-table-update-interval  uint32
|   +--ro route-info-timeout-interval  uint32
|   +--ro garbage-collection-interval  uint32

```

---

---

```
+--rw maximum-prefix
| +--rw config!
| | +--rw max-routes          uint32
| | +--rw warning-threshold-percentage?  uint32
| +--ro state
|   +--ro max-routes          uint32
|   +--ro warning-threshold-percentage?  uint32
+--rw redistribute-policies
| +--rw redistribute-policy* [route-type]
|   +--rw route-type  -> ../config/route-type
|   +--rw config
|     | +--rw route-type?  ipi-rip-types:rip_redistribute_proto_t
|     | +--rw metric?      uint8
|     | +--rw route-map?   string
|     +--ro state
|       +--ro route-type?  ipi-rip-types:rip_redistribute_proto_t
|       +--ro metric?      uint8
|       +--ro route-map?   string
+--rw default-information
| +--rw config!
| | +--rw originate          empty
| | +--rw always-advertise?  empty
| | +--rw route-map?        string
| +--ro state
|   +--ro originate          empty
|   +--ro always-advertise?  empty
|   +--ro route-map?        string
+--rw offset-lists
| +--rw offset-list* [direction]
|   +--rw direction  -> ../config/direction
|   +--rw config
|     | +--rw direction?      ipi-rip-types:rip_direction_t
|     | +--rw access-list-name  string
|     | +--rw metric           uint8
|     +--ro state
|       +--ro direction?      ipi-rip-types:rip_direction_t
```

---

```

|   +--ro access-list-name  string
|   +--ro metric            uint8
+--rw distribute-filter-lists
| +--rw distribute-filter-list* [direction]
|   +--rw direction  -> ../config/direction
|   +--rw config
|   | +--rw direction?      ipi-rip-types:rip_direction_t
|   | +--rw access-list-name  string
|   +--ro state
|   +--ro direction?      ipi-rip-types:rip_direction_t
|   +--ro access-list-name  string
+--rw distribute-prefix-lists
| +--rw distribute-prefix-list* [direction]
|   +--rw direction  -> ../config/direction
|   +--rw config
|   | +--rw direction?      ipi-rip-types:rip_direction_t
|   | +--rw access-list-name  string
|   +--ro state
|   +--ro direction?      ipi-rip-types:rip_direction_t
|   +--ro access-list-name  string
+--rw interfaces
| +--rw interface* [name]
|   +--rw name          -> ../config/name
|   +--rw config
|   | +--rw name?  -> /ipi-interface:interfaces/interface/name
|   +--ro state
|   | +--ro name?  -> /ipi-interface:interfaces/interface/name
|   +--rw offset-lists
|   | +--rw offset-list* [direction]
|   |   +--rw direction  -> ../config/direction
|   |   +--rw config
|   |   | +--rw direction?      ipi-rip-types:rip_direction_t
|   |   | +--rw access-list-name  string
|   |   | +--rw metric            uint8
|   |   +--ro state
|   |   +--ro direction?      ipi-rip-types:rip_direction_t

```

---

---

```

| |   +--ro access-list-name  string
| |   +--ro metric            uint8
|   +--rw distribute-filter-lists
| |   +--rw distribute-filter-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| | |   +--rw direction?      ipi-rip-types:rip_direction_t
| | |   +--rw access-list-name  string
| |   +--ro state
| |   +--ro direction?      ipi-rip-types:rip_direction_t
| |   +--ro access-list-name  string
|   +--rw distribute-prefix-lists
| |   +--rw distribute-prefix-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| | |   +--rw direction?      ipi-rip-types:rip_direction_t
| | |   +--rw access-list-name  string
| |   +--ro state
| |   +--ro direction?      ipi-rip-types:rip_direction_t
| |   +--ro access-list-name  string
+--ro routes
| +--ro route* [prefix]
|   +--ro prefix  -> ../state/prefix
|   +--ro state
| |   +--ro prefix?      cml-data-types:cml_ipv4_prefix_t
| |   +--ro type?       ipi-rip-types:rip_route_type_t
| |   +--ro rip-sub-type? ipi-rip-types:rip_route_subtype_t
| |   +--ro tag?        uint16
|   +--ro nexthops
| |   +--ro nexthop* [address]
| |   +--ro address  -> ../state/address
| |   +--ro state
| |   +--ro address?  inet:ipv4-address
| |   +--ro if-name?  string
| |   +--ro metric?   uint8
| |   +--ro up-time?  string

```

---



```

+--rw vrfs
  +--rw vrf* [vrf-name]
    +--rw vrf-name          -> ../config/vrf-name
    +--rw config
      | +--rw enable-cisco-metric-behavior? cml-data-types:cml_enable_disable_t
      | +--rw default-metric?             uint8
      | +--rw version?                    uint8
      | +--rw distance?                   uint8
      | +--rw network-interfaces*         -> /ipi-interface:interfaces/interface/name
      | +--rw network-routes*             cml-data-types:cml_ipv4_prefix_t
      | +--rw vrf-name?                   -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/
vrf-name
      +--ro state
        | +--ro enable-cisco-metric-behavior? cml-data-types:cml_enable_disable_t
        | +--ro default-metric?             uint8
        | +--ro version?                    uint8
        | +--ro distance?                   uint8
        | +--ro network-interfaces*         -> /ipi-interface:interfaces/interface/name
        | +--ro network-routes*             cml-data-types:cml_ipv4_prefix_t
        | +--ro vrf-name?                   -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/
vrf-name
      +--rw distances
        | +--rw distance* [source-prefix]
        |   +--rw source-prefix -> ../config/source-prefix
        |   +--rw config
        |     | +--rw source-prefix? cml-data-types:cml_ipv4_prefix_t
        |     | +--rw distance      uint8
        |     | +--rw access-list-name? string
        |     +--ro state
        |       +--ro source-prefix? cml-data-types:cml_ipv4_prefix_t
        |       +--ro distance      uint8
        |       +--ro access-list-name? string
      +--rw redistribute-policies
        | +--rw redistribute-policy* [route-type]
        |   +--rw route-type -> ../config/route-type
        |   +--rw config
        |     | +--rw route-type? ipi-rip-types:rip_vrf_redistribute_proto_t

```

---

```

| | +--rw metric?      uint8
| | +--rw route-map?   string
| +--ro state
|   +--ro route-type?  ipi-rip-types:rip_vrf_redistribute_proto_t
|   +--ro metric?      uint8
|   +--ro route-map?   string
+--rw default-information
| +--rw config!
| | +--rw originate      empty
| | +--rw always-advertise? empty
| | +--rw route-map?     string
| +--ro state
|   +--ro originate      empty
|   +--ro always-advertise? empty
|   +--ro route-map?     string
+--rw offset-lists
| +--rw offset-list* [direction]
|   +--rw direction    -> ../config/direction
|   +--rw config
|   | +--rw direction?    ipi-rip-types:rip_direction_t
|   | +--rw access-list-name string
|   | +--rw metric        uint8
|   +--ro state
|     +--ro direction?    ipi-rip-types:rip_direction_t
|     +--ro access-list-name string
|     +--ro metric        uint8
+--rw distribute-filter-lists
| +--rw distribute-filter-list* [direction]
|   +--rw direction    -> ../config/direction
|   +--rw config
|   | +--rw direction?    ipi-rip-types:rip_direction_t
|   | +--rw access-list-name string
|   +--ro state
|     +--ro direction?    ipi-rip-types:rip_direction_t
|     +--ro access-list-name string
+--rw distribute-prefix-lists

```

---

```
| +--rw distribute-prefix-list* [direction]
|   +--rw direction  -> ../config/direction
|   +--rw config
|   | +--rw direction?      ipi-rip-types:rip_direction_t
|   | +--rw access-list-name  string
|   +--ro state
|       +--ro direction?      ipi-rip-types:rip_direction_t
|       +--ro access-list-name  string
+--rw interfaces
| +--rw interface* [name]
|   +--rw name              -> ../config/name
|   +--rw config
|   | +--rw name?  -> /ipi-interface:interfaces/interface/name
|   +--ro state
|   | +--ro name?  -> /ipi-interface:interfaces/interface/name
|   +--rw offset-lists
|   | +--rw offset-list* [direction]
|   |   +--rw direction  -> ../config/direction
|   |   +--rw config
|   |   | +--rw direction?      ipi-rip-types:rip_direction_t
|   |   | +--rw access-list-name  string
|   |   | +--rw metric          uint8
|   |   +--ro state
|   |       +--ro direction?      ipi-rip-types:rip_direction_t
|   |       +--ro access-list-name  string
|   |       +--ro metric          uint8
|   +--rw distribute-filter-lists
|   | +--rw distribute-filter-list* [direction]
|   |   +--rw direction  -> ../config/direction
|   |   +--rw config
|   |   | +--rw direction?      ipi-rip-types:rip_direction_t
|   |   | +--rw access-list-name  string
|   |   +--ro state
|   |       +--ro direction?      ipi-rip-types:rip_direction_t
|   |       +--ro access-list-name  string
|   +--rw distribute-prefix-lists
```

```

|   +--rw distribute-prefix-list* [direction]
|   +--rw direction   -> ../config/direction
|   +--rw config
|   |   +--rw direction?      ipi-rip-types:rip_direction_t
|   |   +--rw access-list-name string
|   +--ro state
|   +--ro direction?      ipi-rip-types:rip_direction_t
|   +--ro access-list-name string
+--ro routes
+--ro route* [prefix]
+--ro prefix   -> ../state/prefix
+--ro state
| +--ro prefix?      cml-data-types:cml_ipv4_prefix_t
| +--ro type?        ipi-rip-types:rip_route_type_t
| +--ro rip-sub-type? ipi-rip-types:rip_route_subtype_t
| +--ro tag?         uint16
+--ro nexthops
+--ro nexthop* [address]
+--ro address   -> ../state/address
+--ro state
+--ro address?  inet:ipv4-address
+--ro if-name?  string
+--ro metric?   uint8
+--ro up-time?  string

```

rpcs:

```

+---x rip-vrf-clear-route {feature-list:HAVE_VRF_RIP,feature-list:HAVE_RIPD}?
| +---w input
| +---w vrf-name string
| +---w prefix   cml-data-types:cml_ipv4_prefix_t
+---x rip-vrf-clear-route-all {feature-list:HAVE_VRF_RIP,feature-list:HAVE_RIPD}?
| +---w input
| +---w vrf-name string
+---x rip-clear-route {feature-list:HAVE_RIPD}?
| +---w input
| +---w route-type ipi-rip-types:rip_redistribute_proto_clear_t

```

```

+---x rip-clear-route-prefix {feature-list:HAVE_RIPD}?
| +---w input
|   +---w prefix-address  cml-data-types:cml_ipv4_prefix_t
+---x rip-clear-statistics {feature-list:HAVE_RIPD}?
| +---w input
|   +---w name  string
+---x rip-snmp-restart {feature-list:HAVE_SNMP}?
+---x rip-terminal-debugging-on {feature-list:HAVE_RIPD}?
| +---w input
|   +---w terminal-debug-options  ipi-rip-types:rip_debug_t
+---x rip-terminal-debugging-off {feature-list:HAVE_RIPD}?
    +---w input
        +---w terminal-debug-options  ipi-rip-types:rip_debug_t

```

---

## module: ipi-ripng

```

+--rw ripng
| +--rw debug
| | +--rw config
| | | +--rw options?  ipi-ripng-types:ripng_debug_t
| | +--ro state
| | +--ro options?      ipi-ripng-types:ripng_debug_t
| | +--ro terminal-debug-status?  ipi-ripng-types:ripng_debug_t
+--rw interfaces
| +--rw interface* [name]
|   +--rw name  -> ../config/name
|   +--rw config
|   | +--rw name?      -> /ipi-interface:interfaces/interface/name
|   | +--rw enabled?   empty
|   | +--rw split-horizon?  boolean
|   | +--rw metric-offset? uint8
|   +--ro state
|     +--ro name?      -> /ipi-interface:interfaces/interface/name

```

---

```

|   +--ro enabled?      empty
|   +--ro split-horizon? boolean
|   +--ro metric-offset? uint8
+--rw instance
  +--rw config!
    | +--rw passive-interfaces*      -> /ipi-interface:interfaces/interface/name
    | +--rw distance?                uint8
    | +--rw static-routes*           cml-data-types:cml_ipv6_prefix_t
    | +--rw aggregate-prefixes*      cml-data-types:cml_ipv6_prefix_t
    | +--rw default-metric?          uint8
    | +--rw originate-default-route? empty
    | +--rw enable-cisco-metric-behavior? boolean
    | +--rw receive-buffer-size?     uint32
    | +--rw ripng-enabled            empty
  +--ro state
    | +--ro passive-interfaces*      -> /ipi-interface:interfaces/interface/name
    | +--ro distance?                uint8
    | +--ro static-routes*           cml-data-types:cml_ipv6_prefix_t
    | +--ro aggregate-prefixes*      cml-data-types:cml_ipv6_prefix_t
    | +--ro default-metric?          uint8
    | +--ro originate-default-route? empty
    | +--ro enable-cisco-metric-behavior? boolean
    | +--ro receive-buffer-size?     uint32
    | +--ro ripng-enabled            empty
  +--rw redistribute-policies
    | +--rw redistribute-policy* [route-type]
    |   +--rw route-type -> ../config/route-type
    |   +--rw config
    |     | +--rw metric?      uint8
    |     | +--rw route-map?   string
    |     | +--rw route-type?  ipi-ripng-types:ripng_redistribute_proto_t
    |     +--ro state
    |       +--ro metric?      uint8
    |       +--ro route-map?   string
    |       +--ro route-type?  ipi-ripng-types:ripng_redistribute_proto_t
  +--rw timers

```

---

```
| +--rw config!  
| | +--rw route-table-update-interval uint32  
| | +--rw route-info-timeout-interval uint32  
| | +--rw garbage-collection-interval uint32  
| +--ro state  
|   +--ro route-table-update-interval uint32  
|   +--ro route-info-timeout-interval uint32  
|   +--ro garbage-collection-interval uint32  
+--rw neighbors  
| +--rw neighbor* [address]  
|   +--rw address -> ../config/address  
|   +--rw config  
|     +--rw address? inet:ipv6-address  
|     +--rw if-name -> /ipi-interface:interfaces/interface/name  
|     +--ro state  
|       +--ro address? inet:ipv6-address  
|       +--ro if-name -> /ipi-interface:interfaces/interface/name  
+--rw interfaces  
| +--rw interface* [name]  
|   +--rw name -> ../config/name  
|   +--rw config  
|     +--rw name? -> /ipi-interface:interfaces/interface/name  
|     +--ro state  
|       +--ro name? -> /ipi-interface:interfaces/interface/name  
|     +--rw filtering-route-maps  
|       +--rw filtering-route-map* [type]  
|         +--rw type -> ../config/type  
|         +--rw config  
|           +--rw type? ipi-ripng-types:ripng_direction_t  
|           +--rw route-map-name string  
|           +--ro state  
|             +--ro type? ipi-ripng-types:ripng_direction_t  
|             +--ro route-map-name string  
|     +--rw offset-lists  
|       +--rw offset-list* [direction]  
|         +--rw direction -> ../config/direction
```

---

```

| | +--rw config
| | | +--rw direction?      ipi-ripng-types:ripng_direction_t
| | | +--rw access-list-name  string
| | | +--rw metric           uint8
| | +--ro state
| |   +--ro direction?      ipi-ripng-types:ripng_direction_t
| |   +--ro access-list-name  string
| |   +--ro metric          uint8
| +--rw distribute-lists
| | +--rw distribute-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| |     | +--rw direction?      ipi-ripng-types:ripng_direction_t
| |     | +--rw access-list-name  string
| |     +--ro state
| |       +--ro direction?      ipi-ripng-types:ripng_direction_t
| |       +--ro access-list-name  string
| +--rw distribute-prefix-lists
| | +--rw distribute-prefix-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| |     | +--rw direction? ipi-ripng-types:ripng_direction_t
| |     | +--rw list-name  string
| |     +--ro state
| |       +--ro direction? ipi-ripng-types:ripng_direction_t
| |       +--ro list-name  string
+--rw offset-lists
| +--rw offset-list* [direction]
|   +--rw direction  -> ../config/direction
|   +--rw config
| | +--rw direction?      ipi-ripng-types:ripng_direction_t
| | +--rw access-list-name  string
| | +--rw metric           uint8
| +--ro state
|   +--ro direction?      ipi-ripng-types:ripng_direction_t
|   +--ro access-list-name  string

```

---



---

```

|   +--ro metric          uint8
+--rw distribute-lists
| +--rw distribute-list* [direction]
|   +--rw direction   -> ../config/direction
|   +--rw config
|   | +--rw direction?    ipi-ripng-types:ripng_direction_t
|   | +--rw access-list-name  string
|   +--ro state
|   +--ro direction?    ipi-ripng-types:ripng_direction_t
|   +--ro access-list-name  string
+--rw distribute-prefix-lists
| +--rw distribute-prefix-list* [direction]
|   +--rw direction   -> ../config/direction
|   +--rw config
|   | +--rw direction?  ipi-ripng-types:ripng_direction_t
|   | +--rw list-name   string
|   +--ro state
|   +--ro direction?  ipi-ripng-types:ripng_direction_t
|   +--ro list-name   string
+--ro routes
| +--ro route* [prefix]
|   +--ro prefix      -> ../state/prefix
|   +--ro state
|   | +--ro prefix?    cml-data-types:cml_ipv6_prefix_t
|   | +--ro type?     ipi-ripng-types:ripng_route_type_t
|   | +--ro sub-type?  ipi-ripng-types:ripng_route_sub_type_t
|   | +--ro tag?      uint16
|   +--ro next-hops
|   | +--ro next-hop* [address]
|   |   +--ro address  -> ../state/address
|   |   +--ro state
|   |     +--ro address?  inet:ipv6-address
|   |     +--ro if-name?  string
|   |     +--ro metric?   uint8
|   |     +--ro up-time?  string
|   +--ro aggregate-route

```

---

---

```

|   +--ro state
|   +--ro count?  uint32
|   +--ro metric?  uint8
|   +--ro tag?    uint16
+--rw vrfs
  +--rw vrf* [vrf-name]
    +--rw vrf-name          -> ../config/vrf-name
    +--rw config
      | +--rw passive-interfaces*      -> /ipi-interface:interfaces/interface/name
      | +--rw distance?                uint8
      | +--rw static-routes*           cml-data-types:cml_ipv6_prefix_t
      | +--rw aggregate-prefixes*      cml-data-types:cml_ipv6_prefix_t
      | +--rw default-metric?          uint8
      | +--rw originate-default-route?  empty
      | +--rw enable-cisco-metric-behavior?  boolean
      | +--rw receive-buffer-size?      uint32
      | +--rw vrf-name?                -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/
vrf-name
      +--ro state
      | +--ro passive-interfaces*      -> /ipi-interface:interfaces/interface/name
      | +--ro distance?                uint8
      | +--ro static-routes*           cml-data-types:cml_ipv6_prefix_t
      | +--ro aggregate-prefixes*      cml-data-types:cml_ipv6_prefix_t
      | +--ro default-metric?          uint8
      | +--ro originate-default-route?  empty
      | +--ro enable-cisco-metric-behavior?  boolean
      | +--ro receive-buffer-size?      uint32
      | +--ro vrf-name?                -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/
vrf-name
      +--rw redistribute-policies
      | +--rw redistribute-policy* [route-type]
      |   +--rw route-type  -> ../config/route-type
      |   +--rw config
      |     | +--rw metric?    uint8
      |     | +--rw route-map? string
      |     | +--rw route-type? ipi-ripng-types:ripng_vrf_redistribute_proto_t
      |     +--ro state

```

---

```
|   +--ro metric?    uint8
|   +--ro route-map? string
|   +--ro route-type? ipi-ripng-types:ripng_vrf_redistribute_proto_t
+--rw timers
| +--rw config!
| | +--rw route-table-update-interval  uint32
| | +--rw route-info-timeout-interval  uint32
| | +--rw garbage-collection-interval  uint32
| +--ro state
|   +--ro route-table-update-interval  uint32
|   +--ro route-info-timeout-interval  uint32
|   +--ro garbage-collection-interval  uint32
+--rw neighbors
| +--rw neighbor* [address]
|   +--rw address  -> ../config/address
|   +--rw config
|   | +--rw address? inet:ipv6-address
|   | +--rw if-name  -> /ipi-interface:interfaces/interface/name
|   +--ro state
|     +--ro address? inet:ipv6-address
|     +--ro if-name  -> /ipi-interface:interfaces/interface/name
+--rw interfaces
| +--rw interface* [name]
|   +--rw name          -> ../config/name
|   +--rw config
|   | +--rw name?  -> /ipi-interface:interfaces/interface/name
|   +--ro state
|   | +--ro name?  -> /ipi-interface:interfaces/interface/name
|   +--rw filtering-route-maps
|   | +--rw filtering-route-map* [type]
|   |   +--rw type  -> ../config/type
|   |   +--rw config
|   |   | +--rw type?      ipi-ripng-types:ripng_direction_t
|   |   | +--rw route-map-name string
|   |   +--ro state
|   |     +--ro type?      ipi-ripng-types:ripng_direction_t
```

```
| |   +--ro route-map-name  string
| +--rw offset-lists
| |   +--rw offset-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| | |   +--rw direction?      ipi-ripng-types:ripng_direction_t
| | |   +--rw access-list-name  string
| | |   +--rw metric           uint8
| |   +--ro state
| |   +--ro direction?      ipi-ripng-types:ripng_direction_t
| |   +--ro access-list-name  string
| |   +--ro metric           uint8
| +--rw distribute-lists
| |   +--rw distribute-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| | |   +--rw direction?      ipi-ripng-types:ripng_direction_t
| | |   +--rw access-list-name  string
| |   +--ro state
| |   +--ro direction?      ipi-ripng-types:ripng_direction_t
| |   +--ro access-list-name  string
| +--rw distribute-prefix-lists
| |   +--rw distribute-prefix-list* [direction]
| |   +--rw direction  -> ../config/direction
| |   +--rw config
| | |   +--rw direction? ipi-ripng-types:ripng_direction_t
| | |   +--rw list-name  string
| |   +--ro state
| |   +--ro direction? ipi-ripng-types:ripng_direction_t
| |   +--ro list-name  string
+--rw offset-lists
| +--rw offset-list* [direction]
| +--rw direction  -> ../config/direction
| +--rw config
| |   +--rw direction?      ipi-ripng-types:ripng_direction_t
| |   +--rw access-list-name  string
```

---

```

| | +--rw metric          uint8
| +--ro state
|   +--ro direction?      ipi-ripng-types:ripng_direction_t
|   +--ro access-list-name string
|   +--ro metric          uint8
+--rw distribute-lists
| +--rw distribute-list* [direction]
| +--rw direction  -> ../config/direction
| +--rw config
| | +--rw direction?      ipi-ripng-types:ripng_direction_t
| | +--rw access-list-name string
| +--ro state
|   +--ro direction?      ipi-ripng-types:ripng_direction_t
|   +--ro access-list-name string
+--rw distribute-prefix-lists
| +--rw distribute-prefix-list* [direction]
| +--rw direction  -> ../config/direction
| +--rw config
| | +--rw direction? ipi-ripng-types:ripng_direction_t
| | +--rw list-name  string
| +--ro state
|   +--ro direction? ipi-ripng-types:ripng_direction_t
|   +--ro list-name  string
+--ro routes
+--ro route* [prefix]
+--ro prefix      -> ../state/prefix
+--ro state
| +--ro prefix?    cml-data-types:cml_ipv6_prefix_t
| +--ro type?      ipi-ripng-types:ripng_route_type_t
| +--ro sub-type?  ipi-ripng-types:ripng_route_sub_type_t
| +--ro tag?       uint16
+--ro next-hops
| +--ro next-hop* [address]
|   +--ro address  -> ../state/address
|   +--ro state
|     +--ro address? inet:ipv6-address

```

---

```

|   +--ro if-name?  string
|   +--ro metric?   uint8
|   +--ro up-time?  string
+--ro aggregate-route
    +--ro state
        +--ro count?   uint32
        +--ro metric?   uint8
        +--ro tag?     uint16

```

rpcs:

```

+---x ripng-terminal-debug-on {feature-list:HAVE_RIPNGD}?
| +---w input
|   +---w terminal-debug-options  ipi-ripng-types:ripng_debug_t
+---x ripng-terminal-debug-off {feature-list:HAVE_RIPNGD}?
| +---w input
|   +---w terminal-debug-options  ipi-ripng-types:ripng_debug_t
+---x ripng-clear-route {feature-list:HAVE_RIPNGD}?
| +---w input
|   +---w type  ipi-ripng-types:ripng_clear_route_type_t
+---x ripng-clear-route-prefix {feature-list:HAVE_RIPNGD}?
| +---w input
|   +---w prefix  cml-data-types:cml_ipv6_prefix_t

```

---

## module: ipi-role-based-access-control

```

+--rw role-based-access-control
    +--rw config
    | +--rw enable?  empty
    +--ro state
    | +--ro enable?  empty
    +--rw policies
    | +--rw policy* [policy-name]
    |   +--rw policy-name  -> ../config/policy-name
    |   +--rw config
    |   | +--rw policy-name?  string

```

```

|   +--ro state
|   |   +--ro policy-name?  string
|   +--rw rules
|       +--rw rule* [rule-name]
|           +--rw rule-name   -> ../config/rule-name
|           +--rw config
|               |   +--rw rule-name?    cml-data-types:cml_line_t
|               |   +--rw rule-type     ipi-role-based-access-control-types:rbac_rule_type_t
|               |   +--rw command-mode* string
|           +--ro state
|               +--ro rule-name?    cml-data-types:cml_line_t
|               +--ro rule-type     ipi-role-based-access-control-types:rbac_rule_type_t
|               +--ro command-mode* string
+--rw roles
    +--rw role* [role-name]
        +--rw role-name   -> ../config/role-name
        +--rw config
            |   +--rw role-name?    string
            |   +--rw default-policy? ipi-role-based-access-control-types:rbac_default_rule_type_t
        +--ro state
            |   +--ro role-name?    string
            |   +--ro default-policy? ipi-role-based-access-control-types:rbac_default_rule_type_t
        +--rw policies
            +--rw policy* [policy-name]
                +--rw policy-name   -> ../config/policy-name
                +--rw config
                    |   +--rw policy-name? -> /role-based-access-control/policies/policy/policy-name
                +--ro state
                    +--ro policy-name? -> /role-based-access-control/policies/policy/policy-name

```

---

## module: ipi-routemap

```

+--rw routemaps
    +--rw routemap* [routemap-name sequence-id]
        +--rw routemap-name   -> ../config/routemap-name

```

```
+--rw sequence-id      -> ../config/sequence-id
+--rw config
| +--rw routemap-name? string
| +--rw action          ipi-routemap-types:rmap_action_type_t
| +--rw sequence-id?   uint32
+--ro state
| +--ro routemap-name? string
| +--ro action          ipi-routemap-types:rmap_action_type_t
| +--ro sequence-id?   uint32
+--rw continue-on-match
| +--rw config
| | +--rw continue-to-next-sequence? empty
| | +--rw next-sequence-number?      uint32
| +--ro state
|   +--ro continue-to-next-sequence? empty
|   +--ro next-sequence-number?      uint32
+--rw match-condition
| +--rw config
| | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
| | +--rw metric?         uint32
| | +--rw tag?            uint32
| | +--rw route-type?     ipi-routemap-types:rmap_route_type_t
| | +--rw as-path-name?   string
| | +--rw route-origin?   ipi-routemap-types:rmap_origin_type_t
| +--ro state
| | +--ro interface-name? -> /ipi-interface:interfaces/interface/name
| | +--ro metric?         uint32
| | +--ro tag?            uint32
| | +--ro route-type?     ipi-routemap-types:rmap_route_type_t
| | +--ro as-path-name?   string
| | +--ro route-origin?   ipi-routemap-types:rmap_origin_type_t
| +--rw communities
| | +--rw community* [community-identifier]
| |   +--rw community-identifier -> ../config/community-identifier
| |   +--rw config
| |     | +--rw community-identifier? ipi-routemap-types:rmap_community_string_t
```



---

```

| | | +--rw match-type          ipi-routemap-types:rmap_community_type_t
| |   +--ro state
| |     +--ro community-identifier? ipi-routemap-types:rmap_community_string_t
| |     +--ro match-type          ipi-routemap-types:rmap_community_type_t
| +--rw extended-communities
| | +--rw extended-community* [extended-community-identifier]
| |   +--rw extended-community-identifier -> ../config/extended-community-identifier
| |   +--rw config
| |     | +--rw extended-community-identifier? ipi-routemap-types:rmap_extcommunity_string_t
| |     | +--rw match-type          ipi-routemap-types:rmap_community_type_t
| |     | +--ro state
| |     |   +--ro extended-community-identifier? ipi-routemap-types:rmap_extcommunity_string_t
| |     |   +--ro match-type          ipi-routemap-types:rmap_community_type_t
| +--rw ipv4
| | +--rw config
| | | +--rw ip-access-list-name?    string
| | | +--rw ip-prefix-list-name?   string
| | | +--rw peer-access-list-name? string
| | | +--rw next-hop-prefix-list-name? string
| | | +--rw next-hop-access-list-name? string
| | +--ro state
| |   +--ro ip-access-list-name?    string
| |   +--ro ip-prefix-list-name?    string
| |   +--ro peer-access-list-name?  string
| |   +--ro next-hop-prefix-list-name? string
| |   +--ro next-hop-access-list-name? string
| +--rw ipv6 {feature-list:HAVE_IPV6}?
| | +--rw config {feature-list:HAVE_IPV6}?
| | | +--rw ipv6-address-access-list-name? string
| | | +--rw ipv6-prefix-list-name?        string
| | | +--rw peer-access-list-name?        string
| | | +--rw next-hop-prefix-list-name?    string
| | | +--rw next-hop-match-string?        ipi-routemap-types:rmap_ipv6_nexthop_t
| | +--ro state
| |   +--ro ipv6-address-access-list-name? string
| |   +--ro ipv6-prefix-list-name?        string

```

---

---

```

| |  +--ro peer-access-list-name?      string
| |  +--ro next-hop-prefix-list-name?  string
| |  +--ro next-hop-match-string?      ipi-routemap-types:rmap_ipv6_nexthop_t
|  +--rw large-match-community
|    +--rw config!
|      | +--rw large-community-number-match?  cml-data-types:cml_line_t
|      +--ro state
|        +--ro large-community-number-match?  cml-data-types:cml_line_t
+--rw set-action
  +--rw config
    | +--rw forward-interface-type?      ipi-routemap-types:rmap_forward_interface_type_t
    | +--rw metric-value?                string
    | +--rw route-tag?                   uint32
    | +--rw weight?                      uint32
    | +--rw local-preference?            uint32
    | +--rw route-origin-type?          ipi-routemap-types:rmap_origin_type_t
    | +--rw metric-type?                 ipi-routemap-types:rmap_metric_type_t
    | +--rw aigp-metric?                 ipi-routemap-types:aigp_metric_type_t {feature-list:HAVE_BGP_AIGP}?
    | +--rw level-type?                  ipi-routemap-types:rmap_level_type_t
    | +--rw enable-as-path-tag?          empty
    | +--rw atomic-aggregate?            empty
    | +--rw delete-community-value?      ipi-routemap-types:rmap_community_string_t
    | +--rw bgp-originator-id?           inet:ipv4-address
    | +--rw as-path-prepend?              cml-data-types:cml_line_t
    | +--rw ext-community-site-of-origin? cml-data-types:cml_line_t
    | +--rw ext-community-color?          uint32
    +--ro state
      | +--ro forward-interface-type?      ipi-routemap-types:rmap_forward_interface_type_t
      | +--ro metric-value?                string
      | +--ro route-tag?                   uint32
      | +--ro weight?                      uint32
      | +--ro local-preference?            uint32
      | +--ro route-origin-type?          ipi-routemap-types:rmap_origin_type_t
      | +--ro metric-type?                 ipi-routemap-types:rmap_metric_type_t
      | +--ro aigp-metric?                 ipi-routemap-types:aigp_metric_type_t {feature-list:HAVE_BGP_AIGP}?
      | +--ro level-type?                  ipi-routemap-types:rmap_level_type_t

```

---

---

```
| +--ro enable-as-path-tag?      empty
| +--ro atomic-aggregate?       empty
| +--ro delete-community-value?  ipi-routemap-types:rmap_community_string_t
| +--ro bgp-originator-id?      inet:ipv4-address
| +--ro as-path-prepend?        cml-data-types:cml_line_t
| +--ro ext-community-site-of-origin? cml-data-types:cml_line_t
| +--ro ext-community-color?     uint32
+--rw ipv4
| +--rw config
| | +--rw ip-nexthop-address?    inet:ipv4-address
| | +--rw use-peer-address?     empty
| | +--rw vpnv4-nexthop-address? inet:ipv4-address {feature-list:HAVE_VRF}?
| +--ro state
|   +--ro ip-nexthop-address?    inet:ipv4-address
|   +--ro use-peer-address?     empty
|   +--ro vpnv4-nexthop-address? inet:ipv4-address {feature-list:HAVE_VRF}?
+--rw ipv6
| +--rw config
| | +--rw ipv6-nexthop-address?  inet:ipv6-address {feature-list:HAVE_IPV6}?
| | +--rw local-ipv6-nexthop-address? inet:ipv6-address {feature-list:HAVE_IPV6}?
| +--ro state
|   +--ro ipv6-nexthop-address?  inet:ipv6-address {feature-list:HAVE_IPV6}?
|   +--ro local-ipv6-nexthop-address? inet:ipv6-address {feature-list:HAVE_IPV6}?
+--rw bgp-aggregator-attributes
| +--rw bgp-aggregator-attribute* [as-number aggregator-ip-address]
|   +--rw as-number              -> ../config/as-number
|   +--rw aggregator-ip-address  -> ../config/aggregator-ip-address
|   +--rw config
|     | +--rw as-number?          uint32
|     | +--rw aggregator-ip-address? inet:ipv4-address
|     +--ro state
|       +--ro as-number?          uint32
|       +--ro aggregator-ip-address? inet:ipv4-address
+--rw extended-community
| +--rw route-targets
| | +--rw route-target* [ext-community-rt]
```

---

```

| | +--rw ext-community-rt -> ../config/ext-community-rt
| | +--rw config
| | | +--rw ext-community-rt? cml-data-types:cml_line_t
| | | +--rw additive-type ipi-routemap-types:rmap_additive_type_t
| | +--ro state
| |   +--ro ext-community-rt? cml-data-types:cml_line_t
| |   +--ro additive-type ipi-routemap-types:rmap_additive_type_t
| +--rw costs
|   +--rw cost* [comparison-type community-id cost-value]
|     +--rw comparison-type -> ../config/comparison-type
|     +--rw community-id -> ../config/community-id
|     +--rw cost-value -> ../config/cost-value
|     +--rw config
|       | +--rw comparison-type? ipi-routemap-types:rmap_ext_cost_type_t
|       | +--rw community-id? uint8
|       | +--rw cost-value? uint32
|       +--ro state
|         +--ro comparison-type? ipi-routemap-types:rmap_ext_cost_type_t
|         +--ro community-id? uint8
|         +--ro cost-value? uint32
+--rw dampening
| +--rw config!
| | +--rw enable-dampening empty
| | +--rw reachability-half-life-time? uint8
| | +--rw reuse-time-limit? uint16
| | +--rw suppress-time-limit? uint16
| | +--rw max-suppress-time-limit? uint8
| | +--rw unreachable-half-life-time? uint8
| +--ro state
|   +--ro enable-dampening empty
|   +--ro reachability-half-life-time? uint8
|   +--ro reuse-time-limit? uint16
|   +--ro suppress-time-limit? uint16
|   +--ro max-suppress-time-limit? uint8
|   +--ro unreachable-half-life-time? uint8
+--rw communities

```

```

| +--rw config
| | +--rw enable-internet?      empty
| | +--rw enable-local-as?      empty
| | +--rw enable-no-advertise?  empty
| | +--rw enable-no-export?     empty
| | +--rw no-community-attribute? empty
| | +--rw additive-set?         empty
| | +--rw community-number?     cml-data-types:cml_line_t
| | +--rw community-with-as-number? cml-data-types:cml_line_t
| +--ro state
|   +--ro enable-internet?      empty
|   +--ro enable-local-as?      empty
|   +--ro enable-no-advertise?  empty
|   +--ro enable-no-export?     empty
|   +--ro no-community-attribute? empty
|   +--ro additive-set?         empty
|   +--ro community-number?     cml-data-types:cml_line_t
|   +--ro community-with-as-number? cml-data-types:cml_line_t
+--rw large-community
  +--rw config!
  | +--rw large-community-number-set? cml-data-types:cml_line_t
  +--ro state
    +--ro large-community-number-set? cml-data-types:cml_line_t

```

---

## module: ipi-sflow-interface

augment /ipi-sflow:sampling/ipi-sflow:sflow:

```

+--rw interfaces
  +--rw interface* [name]
    +--rw name      -> ../config/name
    +--rw config
      | +--rw name?      -> /ipi-interface:interfaces/interface/name
      | +--rw enabled?   empty
      | +--rw polling-interval? uint8
      | +--rw collector-id? uint8

```

```

+--ro state
| +--ro name?      -> /ipi-interface:interfaces/interface/name
| +--ro enabled?   empty
| +--ro polling-interval? uint8
| +--ro collector-id? uint8
| +--ro polling-count? yang:counter32
+--rw ingress
| +--rw config!
| | +--rw sampling-rate uint32
| | +--rw sample-size uint16
| +--ro state
| | +--ro sampling-rate uint32
| | +--ro sample-size uint16
| | +--ro sampling-status? ipi-sflow-types:sflow_egress_ingress_t
| | +--ro sampled-packet-count? yang:counter32
+--rw egress
+--rw config!
| +--rw sampling-rate uint32
| +--rw sample-size uint16
+--ro state
+--ro sampling-rate uint32
+--ro sample-size uint16
+--ro sampling-status? ipi-sflow-types:sflow_egress_ingress_t
+--ro sampled-packet-count? yang:counter32

```

rpcs:

```

+---x sflow-clear-statistics {feature-list:HAVE_SFLOW}?
+---w input
+---w interface string

```

---

## module: ipi-sflow

```

+--rw sampling
+--rw sflow
+--rw config!

```

---

```

| +--rw enabled      empty
| +--rw source-address?  inet:ipv4-address
| +--rw cpu-rate-limit?  uint32 {feature-list:HAVE_BROADCOM,feature-list:NOT_HAVE_DUNE}?
+--ro state
| +--ro enabled      empty
| +--ro source-address?  inet:ipv4-address
| +--ro cpu-rate-limit?  uint32 {feature-list:HAVE_BROADCOM,feature-list:NOT_HAVE_DUNE}?
| +--ro sflow-version?   string
| +--ro datagram-version? uint8
+--rw collectors
| +--rw collector* [address port collector-id]
|   +--rw address      -> ../config/address
|   +--rw port          -> ../config/port
|   +--rw collector-id  -> ../config/collector-id
|   +--rw config
|     | +--rw address?      inet:ipv4-address
|     | +--rw port?         inet:port-number
|     | +--rw receiver-timeout  uint32
|     | +--rw max-datagram-size  uint16
|     | +--rw collector-id?     uint8
|     | +--rw vrf-name         -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
|     +--ro state
|     +--ro address?      inet:ipv4-address
|     +--ro port?         inet:port-number
|     +--ro receiver-timeout  uint32
|     +--ro max-datagram-size  uint16
|     +--ro collector-id?     uint8
|     +--ro vrf-name         -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
+--rw logging {feature-list:HAVE_CUSTOM1_ACL}?
| +--rw config
| | +--rw max-entries?  uint16
| | +--rw rate-limit?   uint16 {feature-list:HAVE_BROADCOM}?
| +--ro state
|   +--ro max-entries?  uint16
|   +--ro rate-limit?   uint16 {feature-list:HAVE_BROADCOM}?

```

---

```

+--rw debug
  +--rw config
    | +--rw options? ipi-sflow-types:sflow_debug_t
  +--ro state
    +--ro options? ipi-sflow-types:sflow_debug_t
    +--ro terminal-debug-status? ipi-sflow-types:sflow_debug_t

```

rpcs:

```

+---x sflow-clear-access-list-log-cache {feature-list:HAVE_CUSTOM1_ACL}?
+---x sflow-terminal-debug-on {feature-list:HAVE_SFLOW}?
| +---w input
|   +---w terminal-debug-options ipi-sflow-types:sflow_debug_t
+---x sflow-terminal-debug-off {feature-list:HAVE_SFLOW}?
  +---w input
    +---w terminal-debug-options ipi-sflow-types:sflow_debug_t

```

notifications:

```

+---n sflow-receiver-timeout-alarm-message
  +--ro severity? cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message? string

```

---

## module: ipi-snmp-server-extended

```

+--rw snmp-dir
  +--rw config
    | +--rw include-directive? empty
  +--ro state
    +--ro include-directive? empty

```

augment /ipi-snmp:snmp/ipi-snmp-server:servers:

```

+--rw debug {feature-list:HAVE_SNMP_AGENT}?
  +--rw config
    | +--rw enable? empty
  +--ro state

```



```

    +--ro enable?          empty
    +--ro terminal-debug-status? cml-data-types:cml_on_off_t
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw snmp-views {feature-list:HAVE_SNMP_AGENT}?
+--rw snmp-view* [view-name] {feature-list:HAVE_SNMP_AGENT}?
  +--rw view-name -> ../config/view-name
  +--rw config
  | +--rw view-name? string
  +--ro state
  | +--ro view-name? string
+--rw oid-trees
  +--rw oid-tree* [oid] {feature-list:HAVE_SNMP_AGENT}?
    +--rw oid -> ../config/oid
    +--rw config!
    | +--rw oid? string
    | +--rw filter-type ipi-snmp-server-extended-types:snmp_server_oid_tree_t
    +--ro state
    +--ro oid? string
    +--ro filter-type ipi-snmp-server-extended-types:snmp_server_oid_tree_t
augment /ipi-snmp:snmp:
+--rw engine-id {feature-list:HAVE_SNMP_V3,feature-list:HAVE_SNMP_AGENT}?
+--rw config
  | +--rw engine-id? string
+--ro state
  +--ro engine-id? string
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw smux-port {feature-list:HAVE_SNMP_AGENT}?
+--rw config
  | +--rw smux-port-enable? empty
+--ro state
  +--ro smux-port-enable? empty
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw hosts {feature-list:HAVE_SNMP_AGENT}?
+--rw host* [host-name] {feature-list:HAVE_SNMP_AGENT}?
  +--rw host-name -> ../config/host-name
  +--rw config

```

---

```

    | +--rw host-name?          string
    | +--rw snmp-version?       ipi-snmp-server-extended-types:snmp_server_version_t
    | +--rw notification-type?  ipi-snmp-server-extended-types:snmp_server_notification_t
    | +--rw udp-port?           uint32
    | +--rw (host-option)?
    |   +---:(use-community)
    |     | +--rw community?    -> /ipi-snmp:snmp/ipi-snmp-server:servers/server/communities/community/
community-name
    |     +---:(use-snmpv3-user)
    |       | +--rw snmpv3-auth-type? ipi-snmp-server-extended-types:snmp_server_version3_auth_type_t
    |       | +--rw snmpv3-user?    -> /ipi-snmp:snmp/ipi-snmp-server:servers/server/users/user/config/user-name
    |       +---:(use-host-user)
    |         +--rw host-user?     string
+--ro state
  +--ro host-name?          string
  +--ro snmp-version?       ipi-snmp-server-extended-types:snmp_server_version_t
  +--ro notification-type?  ipi-snmp-server-extended-types:snmp_server_notification_t
  +--ro udp-port?           uint32
  +--ro (host-option)?
    +---:(use-community)
      | +--ro community?      -> /ipi-snmp:snmp/ipi-snmp-server:servers/server/communities/community/
community-name
      +---:(use-snmpv3-user)
        | +--ro snmpv3-auth-type? ipi-snmp-server-extended-types:snmp_server_version3_auth_type_t
        | +--ro snmpv3-user?    -> /ipi-snmp:snmp/ipi-snmp-server:servers/server/users/user/config/user-name
        +---:(use-host-user)
          +--ro host-user?     string
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw users {feature-list:HAVE_SNMP_AGENT}?
  +--rw user* [user-name] {feature-list:HAVE_SNMP_AGENT,feature-list:HAVE_SNMP_V3}?
    +--rw user-name  -> ../config/user-name
  +--rw config
    | +--rw user-name?          string
    | +--rw user-type?          ipi-snmp-server-extended-types:snmp_server_group_name_t
    | +--rw user-group?         string
    | +--rw encryption-type?    ipi-snmp-server-extended-types:snmp_server_key_type_t
    | +--rw authentication-type? ipi-snmp-server-extended-types:snmp_server_auth_t

```

---

---

```

| +--rw authentication-password? string
| +--rw privilege-type?      ipi-snmp-server-extended-types:snmp_server_priv_t
| +--rw privilege-password?   string
+--ro state
  +--ro user-name?            string
  +--ro user-type?            ipi-snmp-server-extended-types:snmp_server_group_name_t
  +--ro user-group?           string
  +--ro encryption-type?      ipi-snmp-server-extended-types:snmp_server_key_type_t
  +--ro authentication-type?   ipi-snmp-server-extended-types:snmp_server_auth_t
  +--ro authentication-password? string
  +--ro privilege-type?       ipi-snmp-server-extended-types:snmp_server_priv_t
  +--ro privilege-password?    string
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw contexts {feature-list:HAVE_SNMP_AGENT}?
  +--rw context* [context-name]
    +--rw context-name -> ../config/context-name
    +--rw config
    | +--rw context-name? string
    +--ro state
      +--ro context-name? string
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw communities {feature-list:HAVE_SNMP_AGENT}?
  +--rw community* [community-name] {feature-list:HAVE_SNMP_AGENT}?
    +--rw community-name -> ../config/community-name
    +--rw config
    | +--rw community-name? string
    | +--rw acl-name? -> /ipi-acl:acl/standard-acl-sets/standard-acl-set/name
    | +--rw community-view-name? -> /ipi-snmp:snmp/ipi-snmp-server:servers/server/snmp-views/snmp-view/
view-name
    | +--rw version? ipi-snmp-server-extended-types:snmp_server_view_version_t
    | +--rw access? ipi-snmp-server-extended-types:snmp_server_access_t
    | +--rw (community-option)?
    |   +--:(use-group)
    |   | +--rw snmp-group? ipi-snmp-server-extended-types:snmp_server_group_t
    |   +--:(use-access)
    |   +--rw access-privileges? ipi-snmp-server-extended-types:snmp_server_access_t
    +--ro state

```

---

---

```

    | +--ro community-name?      string
    | +--ro acl-name?            -> /ipi-acl:acl/standard-acl-sets/standard-acl-set/name
    | +--ro community-view-name? -> /ipi-snmp:snmp/ipi-snmp-server:servers/server/snmp-views/snmp-view/
view-name
    | +--ro version?             ipi-snmp-server-extended-types:snmp_server_view_version_t
    | +--ro access?              ipi-snmp-server-extended-types:snmp_server_access_t
    | +--ro (community-option)?
    |   +--:(use-group)
    |     | +--ro snmp-group?      ipi-snmp-server-extended-types:snmp_server_group_t
    |     +--:(use-access)
    |       +--ro access-privileges? ipi-snmp-server-extended-types:snmp_server_access_t
+--rw community-context-mapping
  +--rw config
    | +--rw community-context? string
    | +--rw community-user?   string
  +--ro state
    +--ro community-context? string
    +--ro community-user?   string
augment /ipi-snmp:snmp/ipi-snmp-server:servers/ipi-snmp-server:server:
+--rw server-groups {feature-list:HAVE_SNMP_AGENT}?
  +--rw server-group* [group-name] {feature-list:HAVE_SNMP_AGENT}?
    +--rw group-name -> ../config/group-name
  +--rw config
    | +--rw group-name?      string
    | +--rw group-version?    ipi-snmp-server-extended-types:snmp_server_version_t
    | +--rw snmpv3-group-auth-type? ipi-snmp-server-extended-types:snmp_v3_server_group_auth_type_t
    | +--rw context*          ipi-snmp-server-extended-types:snmp_server_context_name_t
  +--ro state
    +--ro group-name?        string
    +--ro group-version?      ipi-snmp-server-extended-types:snmp_server_version_t
    +--ro snmpv3-group-auth-type? ipi-snmp-server-extended-types:snmp_v3_server_group_auth_type_t
    +--ro context*           ipi-snmp-server-extended-types:snmp_server_context_name_t
augment /ipi-snmp:snmp:
+--ro statistics {feature-list:HAVE_SNMP_AGENT}?
  +--ro state
    +--ro engine-id? cml-data-types:cml_line_t
augment /ipi-snmp:snmp:

```

---

```

+--ro default-global-values {feature-list:HAVE_SNMP_AGENT}?
+--ro state
  +--ro system-default-contact? ipi-snmp-server-extended-types:cml_line_without_pattern_t {feature-
list:HAVE_SNMP_AGENT}?
  +--ro system-default-location? ipi-snmp-server-extended-types:cml_line_without_pattern_t {feature-
list:HAVE_SNMP_AGENT}?

rpcs:
+---x snmp-server-terminal-debug-on {feature-list:HAVE_HOSTPD}?
+---x snmp-server-terminal-debug-off {feature-list:HAVE_HOSTPD}?

```

---

## module: ipi-snmp-server

```

+--rw custom
+--rw config
| +--rw ent-ipi-iftable? empty {feature-list:HAVE_SNMP_AGENT}?
+--ro state
  +--ro ent-ipi-iftable? empty {feature-list:HAVE_SNMP_AGENT}?

augment /ipi-snmp:snmp:
+--rw servers {feature-list:HAVE_SNMP_AGENT}?
  +--rw server* [vrf-name]
  | +--rw vrf-name -> ../config/vrf-name
  | +--rw config!
  | | +--rw vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
  | | +--rw enabled empty
  | +--ro state
  | | +--ro vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
  | | +--ro enabled empty
  | +--rw global
  | +--rw config
  | | +--rw system-contact? cml-data-types:cml_line_t {feature-list:HAVE_SNMP_AGENT}?
  | | +--rw system-location? cml-data-types:cml_line_t {feature-list:HAVE_SNMP_AGENT}?
  | | +--rw tcp-session-enabled? empty {feature-list:HAVE_SNMP_AGENT}?
  | +--ro state

```

---

```

|   +--ro system-contact?      cml-data-types:cml_line_t {feature-list:HAVE_SNMP_AGENT}?
|   +--ro system-location?     cml-data-types:cml_line_t {feature-list:HAVE_SNMP_AGENT}?
|   +--ro tcp-session-enabled?  empty {feature-list:HAVE_SNMP_AGENT}?
+--rw default-instance
  +--rw config
  | +--rw disable-default-instance?  empty
  +--ro state
    +--ro disable-default-instance?  empty

```

---

## module: ipi-snmp

```

+--rw snmp {feature-list:HAVE_SNMP_AGENT}?
  +--rw server-traps
    +--rw config
    | +--rw enable-traps?          ipi-snmp-types:snmp_trap_protocols
    | +--rw enable-link-down-trap? boolean
    | +--rw enable-link-up-trap?  boolean
    | +--rw include-interface-name? empty
    +--ro state
    | +--ro enable-traps?          ipi-snmp-types:snmp_trap_protocols
    | +--ro enable-link-down-trap? boolean
    | +--ro enable-link-up-trap?  boolean
    | +--ro include-interface-name? empty
    +--rw trap-cache
      +--rw config!
      | +--rw enable-trap-cache  empty {feature-list:HAVE_SNMP_AGENT}?
      | +--rw timeout?          int8
      | +--rw disable-ping?     empty
      | +--rw max-count?        int16
      +--ro state
        +--ro enable-trap-cache  empty {feature-list:HAVE_SNMP_AGENT}?
        +--ro timeout?          int8
        +--ro disable-ping?     empty
        +--ro max-count?        int16

```

rpcs:

```
+---x snmp-agentx-enable-terminal-debugging {feature-list:HAVE_AGENTX}?
| +---w input
|   +---w debug   ipi-snmp-types:snmp_agentx_debug_type_t
+---x snmp-agentx-disable-terminal-debugging {feature-list:HAVE_AGENTX}?
  +---w input
    +---w debug   ipi-snmp-types:snmp_agentx_debug_type_t
```

---

## module: ipi-source-interface

```
+--rw source-interface {feature-list:HAVE_HOSTPD}?
  +--rw address-family-ipv4
  | +--rw source-nat-mappings
  |   +--rw source-nat-mapping* [interface-name protocol-type vrf-name]
  |     +--rw interface-name  -> ../config/interface-name
  |     +--rw protocol-type   -> ../config/protocol-type
  |     +--rw vrf-name        -> ../config/vrf-name
  |     +--rw config
  |       | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
  |       | +--rw protocol-type?  ipi-source-interface-types:src_intf_proto_types_t
  |       | +--rw port-number     ipi-source-interface-types:src_intf_port_number_t
  |       | +--rw vrf-name?       -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
  |       {feature-list:HAVE_VRF}?
  |         +--ro state
  |         +--ro interface-name? -> /ipi-interface:interfaces/interface/name
  |         +--ro protocol-type?  ipi-source-interface-types:src_intf_proto_types_t
  |         +--ro port-number     ipi-source-interface-types:src_intf_port_number_t
  |         +--ro vrf-name?       -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
  |         {feature-list:HAVE_VRF}?
  |           +--ro address?      inet:ip-address
  |           +--ro status?       ipi-source-interface-types:src_intf_status_t
  +--rw address-family-ipv6 {feature-list:HAVE_IPV6}?
    +--rw source-nat-mappings
    | +--rw source-nat-mapping* [interface-name protocol-type vrf-name]
    |   +--rw interface-name  -> ../config/interface-name
```

```

+--rw protocol-type   -> ../config/protocol-type
+--rw vrf-name        -> ../config/vrf-name
+--rw config
| +--rw interface-name? -> /ipi-interface:interfaces/interface/name
| +--rw protocol-type?  ipi-source-interface-types:src_intf_proto_types_t
| +--rw port-number     ipi-source-interface-types:src_intf_port_number_t
| +--rw vrf-name?       -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
+--ro state
+--ro interface-name?  -> /ipi-interface:interfaces/interface/name
+--ro protocol-type?   ipi-source-interface-types:src_intf_proto_types_t
+--ro port-number      ipi-source-interface-types:src_intf_port_number_t
+--ro vrf-name?        -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
{feature-list:HAVE_VRF}?
+--ro address?         inet:ip-address
+--ro status?          ipi-source-interface-types:src_intf_status_t

```

---

## module: ipi-ssh

```

+--rw ssh-server
+--rw debug
| +--rw config
| | +--rw enable?  empty
| +--ro state
| +--ro enable?    empty
| +--ro terminal-debug-status? cml-data-types:cml_on_off_t
+--rw vrfs
+--rw vrf* [vrf-name]
+--rw vrf-name      -> ../config/vrf-name
+--rw config
| +--rw vrf-name?    -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
| +--rw enable       boolean {feature-list:HAVE_SSH_SERVER}?
| +--rw port?        uint32 {feature-list:HAVE_SSH_SERVER}?
| +--rw session-limit? uint8 {feature-list:HAVE_SSH_SERVER}?

```



---

```
| +--rw max-login-attempts? uint8 {feature-list:HAVE_SSH_SERVER}?
| +--rw default-algorithm? empty
+--ro state
| +--ro vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
| +--ro enable boolean {feature-list:HAVE_SSH_SERVER}?
| +--ro port? uint32 {feature-list:HAVE_SSH_SERVER}?
| +--ro session-limit? uint8 {feature-list:HAVE_SSH_SERVER}?
| +--ro max-login-attempts? uint8 {feature-list:HAVE_SSH_SERVER}?
| +--ro default-algorithm? empty
+--rw encryption-algorithms {feature-list:HAVE_SSH_SERVER}?
| +--rw config
| | +--rw aes128-ctr? empty
| | +--rw aes192-ctr? empty
| | +--rw aes256-ctr? empty
| | +--rw aes128-cbc? empty
| | +--rw aes192-cbc? empty
| | +--rw aes256-cbc? empty
| | +--rw triple-des-cbc? empty
| | +--rw rijndael-cbc? empty
| | +--rw aes128-gcm? empty
| | +--rw aes256-gcm? empty
| | +--rw chacha20-poly1305? empty
| +--ro state
| | +--ro aes128-ctr? empty
| | +--ro aes192-ctr? empty
| | +--ro aes256-ctr? empty
| | +--ro aes128-cbc? empty
| | +--ro aes192-cbc? empty
| | +--ro aes256-cbc? empty
| | +--ro triple-des-cbc? empty
| | +--ro rijndael-cbc? empty
| | +--ro aes128-gcm? empty
| | +--ro aes256-gcm? empty
| | +--ro chacha20-poly1305? empty
+--rw kex-algorithms {feature-list:HAVE_SSH_SERVER}?
| +--rw config
```

---

---

```

| | +--rw diffie-hellman-group1-sha1?      empty
| | +--rw diffie-hellman-group14-sha1?     empty
| | +--rw diffie-hellman-group14-sha256?   empty
| | +--rw diffie-hellman-group16-sha512?   empty
| | +--rw diffie-hellman-group18-sha512?   empty
| | +--rw diffie-hellman-group-exchange-sha1? empty
| | +--rw diffie-hellman-group-exchange-sha256? empty
| | +--rw ecdh-sha2-nistp256?              empty
| | +--rw ecdh-sha2-nistp384?              empty
| | +--rw ecdh-sha2-nistp521?              empty
| | +--rw curve25519-sha256?               empty
| | +--rw curve25519-sha256-libssh-org?     empty
| +--ro state
|   +--ro diffie-hellman-group1-sha1?      empty
|   +--ro diffie-hellman-group14-sha1?     empty
|   +--ro diffie-hellman-group14-sha256?   empty
|   +--ro diffie-hellman-group16-sha512?   empty
|   +--ro diffie-hellman-group18-sha512?   empty
|   +--ro diffie-hellman-group-exchange-sha1? empty
|   +--ro diffie-hellman-group-exchange-sha256? empty
|   +--ro ecdh-sha2-nistp256?              empty
|   +--ro ecdh-sha2-nistp384?              empty
|   +--ro ecdh-sha2-nistp521?              empty
|   +--ro curve25519-sha256?               empty
|   +--ro curve25519-sha256-libssh-org?     empty
+--rw mac-algorithms {feature-list:HAVE_SSH_SERVER}?
  +--rw config
    | +--rw hmac-sha1?      empty
    | +--rw hmac-sha1-96?   empty
    | +--rw hmac-sha2-256?   empty
    | +--rw hmac-sha2-512?   empty
    | +--rw hmac-md5?        empty
    | +--rw hmac-md5-96?     empty
    | +--rw umac-64?         empty
    | +--rw umac-128?        empty
    | +--rw hmac-sha1-etm?    empty

```

---

```

| +--rw hmac-sha1-96-etm?  empty
| +--rw hmac-sha2-256-etm?  empty
| +--rw hmac-sha2-512-etm?  empty
| +--rw hmac-md5-etm?       empty
| +--rw hmac-md5-96-etm?    empty
| +--rw umac-64-etm?        empty
| +--rw umac-128-etm?       empty
+--ro state
  +--ro hmac-sha1?          empty
  +--ro hmac-sha1-96?       empty
  +--ro hmac-sha2-256?      empty
  +--ro hmac-sha2-512?      empty
  +--ro hmac-md5?           empty
  +--ro hmac-md5-96?        empty
  +--ro umac-64?            empty
  +--ro umac-128?           empty
  +--ro hmac-sha1-etm?      empty
  +--ro hmac-sha1-96-etm?   empty
  +--ro hmac-sha2-256-etm?  empty
  +--ro hmac-sha2-512-etm?  empty
  +--ro hmac-md5-etm?       empty
  +--ro hmac-md5-96-etm?    empty
  +--ro umac-64-etm?        empty
  +--ro umac-128-etm?       empty

```

```
augment /ipi-user-management:user-management/ipi-user-management:users/ipi-user-management:user:
```

```

+--rw ssh-keys
  +--rw config
  | +--rw public-key*  ipi-ssh-types:ssh_public_key_t
  +--ro state
    +--ro public-key*  ipi-ssh-types:ssh_public_key_t
    +--ro rsa-key?     ipi-ssh-types:ssh_public_key_t
    +--ro dsa-key?     ipi-ssh-types:ssh_public_key_t
    +--ro fingerprint-rsa? ipi-ssh-types:ssh_public_key_t
    +--ro fingerprint-dsa? ipi-ssh-types:ssh_public_key_t

```

rpcs:

```
+---x ssh-terminal-debug-on {feature-list:HAVE_HOSTPD}?
+---x ssh-terminal-debug-off {feature-list:HAVE_HOSTPD}?
+---x ssh-clear-hosts {feature-list:HAVE_HOSTPD}?
+---x ssh-generate-server-dsa-key {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w vrf-name?  string
|   +---w force?    boolean
+---x ssh-generate-server-rsa-key {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w length?   uint32
|   +---w vrf-name? string
|   +---w force?    boolean
+---x ssh-generate-server-ecdsa-key {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w length?   ipi-ssh-types:ssh_ecdsa_key_len_t
|   +---w vrf-name? string
|   +---w force?    boolean
+---x ssh-generate-server-ed25519-key {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w vrf-name? string
|   +---w force?    boolean
+---x ssh-clear-server-keys {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w type?     ipi-ssh-types:ssh_host_key_type_t
|   +---w vrf-name? string
+---x ssh-generate-user-rsa-key {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w user-name  string
|   +---w length?   uint32
|   +---w force?    boolean
+---x ssh-generate-user-dsa-key {feature-list:HAVE_SSH_SERVER}?
| +---w input
|   +---w user-name  string
|   +---w force?    boolean
+---x ssh-clear-user-keys {feature-list:HAVE_SSH_SERVER}?
```

```
+---w input
  +---w user-name  string
```

---

## module: ipi-streaming-telemetry

```
+--rw telemetry-system
  +--rw vrfs {feature-list:HAVE_VRF}?
    +--rw vrf* [vrf-name]
      +--rw vrf-name          -> ../config/vrf-name
      +--rw config
        | +--rw vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
        {feature-list:HAVE_VRF}?
          +--ro state
            | +--ro vrf-name? -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
            {feature-list:HAVE_VRF}?
              +--rw streaming-telemetry
                | +--rw config
                | | +--rw feature-enabled?  empty
                | | +--rw retry-interval?   uint32
                | +--ro state
                | | +--ro feature-enabled?    empty
                | | +--ro retry-interval?     uint32
                | | +--ro maximum-sensor-paths?  uint8
                | | +--ro minimum-sample-interval?  uint8
                | | +--ro platform-type?        ipi-streaming-telemetry-types:cml_telemetry_platform_type_t
                | | +--ro default-retry-interval?  uint8
                | | +--ro active-sensor-paths?    uint8
                | | +--ro active-dial-in-sensor-paths?  uint8
                | | +--ro active-dial-out-sensor-paths?  uint8
                | +--rw debug
                |   +--rw config
                |   | +--rw gnmi-debug?  empty
                |   | +--rw gnmi-severity? ipi-streaming-telemetry-types:cml_gnmi_debug_severity_t
                |   +--ro state
                |     +--ro gnmi-debug?  empty
```

---

```

|   +--ro gnmi-severity? ipi-streaming-telemetry-types:cml_gnmi_debug_severity_t
+--rw subscriptions
| +--ro dynamic-subscriptions
| | +--ro dynamic-subscription* [id]
| |   +--ro id          -> ../state/id
| |   +--ro state
| |     | +--ro id?      uint64
| |     | +--ro client-address? string
| |     | +--ro sample-interval? uint64
| |     | +--ro stream-mode? ipi-streaming-telemetry-types:cml_streaming_mode_types_t
| |     | +--ro encoding? ipi-streaming-telemetry-types:cml_data_encode_t
| |     +--ro sensor-paths
| |       +--ro sensor-path* [path]
| |         +--ro path -> ../state/path
| |         +--ro state
| |           +--ro path? string
| +--rw persistent-subscriptions
|   +--rw persistent-subscription* [name]
|     +--rw name          -> ../config/name
|     +--rw config
|       | +--rw name?     string
|       | +--rw encoding? ipi-streaming-telemetry-types:cml_data_encode_t
|       +--ro state
|         | +--ro name?      string
|         | +--ro encoding? ipi-streaming-telemetry-types:cml_data_encode_t
|         | +--ro id?       uint64
|         | +--ro subscription-status? ipi-streaming-telemetry-types:cml_telemetry_status_t
|         | +--ro inactive-cause?     string
|         | +--ro protocol? ipi-streaming-telemetry-types:cml_telemetry_protocol_t
|       +--rw sensor-profiles
|         | +--rw sensor-profile* [sensor-group]
|         |   +--rw sensor-group -> ../config/sensor-group
|         |   +--rw config
|         |     | +--rw sensor-group? -> /telemetry-system/vrfs/vrf/sensor-groups/sensor-group/sensor-group-id
|         |     | +--rw sample-interval uint64
|         |     +--ro state

```

---

---

```

|   |   +--ro sensor-group?   -> /telemetry-system/vrfs/vrf/sensor-groups/sensor-group/sensor-group-id
|   |   +--ro sample-interval  uint64
|   +--rw destination-groups
|       +--rw destination-group* [group-id]
|           +--rw group-id   -> ../config/group-id
|           +--rw config
|               | +--rw group-id? -> /telemetry-system/vrfs/vrf/destination-groups/destination-group/group-id
|               +--ro state
|                   +--ro group-id? -> /telemetry-system/vrfs/vrf/destination-groups/destination-group/group-id
+--rw sensor-groups
| +--rw sensor-group* [sensor-group-id]
|   +--rw sensor-group-id -> ../config/sensor-group-id
|   +--rw config
|       | +--rw sensor-group-id? string
|       +--ro state
|       | +--ro sensor-group-id? string
|   +--rw sensor-paths
|       +--rw sensor-path* [path]
|           +--rw path   -> ../config/path
|           +--rw config
|               | +--rw path? string
|               +--ro state
|                   +--ro path? string
+--rw destination-groups
    +--rw destination-group* [group-id]
        +--rw group-id   -> ../config/group-id
        +--rw config
            | +--rw group-id? string
            +--ro state
            | +--ro group-id? string
        +--rw destinations
            +--rw destination* [destination-address destination-port]
                +--rw destination-address -> ../config/destination-address
                +--rw destination-port   -> ../config/destination-port
                +--rw config
                    | +--rw destination-address? inet:ipv4-address

```

---

---

```
| +--rw destination-port?   uint16
+--ro state
  +--ro destination-address? inet:ipv4-address
  +--ro destination-port?   uint16
```

---

## module: ipi-sys-mgmt

rpcs:

```
+---x sys-shutdown {feature-list:HAVE_PSERVD}?
  +---w input
    +---w save-config  boolean
```

---

## module: ipi-sys-notifications

notifications:

```
+---n lock-forcibly-released
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message?   string
+---n config-sync-completion-status
| +--ro severity?   cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message?   string
+---n config-change
| +--ro message?   string
+---n system-shutdown-or-reload
  +--ro severity?   cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message?   string
```



---

## module: ipi-sys-update

```
+--rw system-update
  +--rw docker
    | +--ro images
    | | +--ro image* [name]
    | |   +--ro name    -> ../state/name
    | |   +--ro state
    | |     +--ro name?  string
    | +--ro info
    | | +--ro state
    | |   +--ro version? string
    | |   +--ro status?  string
    | +--ro download-status
    |   +--ro state
    |     +--ro inprogress? boolean
  +--ro installers
    | +--ro installer* [name]
    |   +--ro name    -> ../state/name
    |   +--ro state
    |     +--ro name?  string
  +--ro system-update-details
    +--ro state
      +--ro previous-version?    cml-data-types:cml_line_t
      +--ro current-version?     cml-data-types:cml_line_t
      +--ro last-upgraded-time?  cml-data-types:cml_line_t
      +--ro auto-rollback-end-time? cml-data-types:cml_line_t
```

rpcs:

```
+---x sys-update-install {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
|   +---w installer-name      string
|   +---w ignore-feature-check boolean
+---x sys-update-uninstall {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
+---x sys-update-get {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
```

```
| +---w source-interface  string
| +---w source-ip?       inet:ip-address
| +---w url               string
| +---w known-hosts-add?  boolean
+---x sys-update-delete {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w image-name  string
+---x sys-update-cancel-download {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
+---x sys-container-install {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w type      ipi-sys-update-types:system_container_type_t
| +---w upgrade-type  ipi-sys-update-types:system_container_upgrade_t
| +---w file       string
+---x sys-container-uninstall {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w type      ipi-sys-update-types:system_container_type_t
| +---w un-install  boolean
+---x sys-container-boot {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w type      ipi-sys-update-types:system_container_type_t
| +---w boot-type  ipi-sys-update-types:system_container_boot_t
+---x sys-container-get {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w type      ipi-sys-update-types:system_container_type_t
| +---w url        string
| +---w source-interface  string
+---x sys-container-remove {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w type  ipi-sys-update-types:system_container_type_t
| +---w file  string
+---x sys-container-verify {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
| +---w input
| +---w type      ipi-sys-update-types:system_container_type_t
| +---w image      string
| +---w signature  string
+---x sys-container-cancel-download {feature-list:HAVE_PSERVD,feature-list:NOT_HAVE_TIBIT}?
```

notifications:

```
+---n sys-update-installation-status
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message?   string
+---n sys-update-download-status
| +--ro severity?  cml-data-types:cml_notif_severity_t
| +--ro eventClass? cml-data-types:cml_notif_class_t
| +--ro message?   string
+---n sys-container-download-status
  +--ro severity?  cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message?   string
```

---

## module: ipi-system

```
+--rw system-info
  +--rw config
  | +--rw hostname? string
  +--ro state
  | +--ro hostname?      string
  | +--ro software-version? string
  | +--ro system-uptime?  system_time_duration
  | +--ro boot-time?      uint64
  | +--ro current-datetime? yang:date-and-time
+--rw clock
  +--rw config
  | +--rw timezone-name? system_timezone_name_t
  +--ro state
    +--ro timezone-name? system_timezone_name_t
```

---

## module: ipi-tacacs

```

+--rw tacacs
  +--rw vrfs
    | +--rw vrf* [vrf-name] {feature-list:HAVE_HOSTPD,feature-list:HAVE_AAA,feature-list:HAVE_TACACS_CLIENT}?
    |   +--rw vrf-name      -> ../config/vrf-name
    |   +--rw config
    |     | +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    |     | +--rw feature-enable  empty
    |     | +--rw timeout?       uint8
    |     | +--rw key-type?      ipi-tacacs-types:tacacs_hostp_key_type_t
    |     | +--rw secret-key-string? string
    |     +--ro state
    |       | +--ro vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
    |       | +--ro feature-enable  empty
    |       | +--ro timeout?       uint8
    |       | +--ro key-type?      ipi-tacacs-types:tacacs_hostp_key_type_t
    |       | +--ro secret-key-string? string
    |       +--rw remote-servers
    |         +--rw server* [host-address] {feature-list:HAVE_HOSTPD,feature-list:HAVE_AAA,feature-
list:HAVE_TACACS_CLIENT}?
    |           +--rw host-address -> ../config/host-address
    |           +--rw config
    |             | +--rw host-address?    cml-data-types:cml_hostname_t
    |             | +--rw sequence-number  uint8
    |             | +--rw port?           uint32
    |             | +--rw timeout?        uint32
    |             | +--rw key-type?       ipi-tacacs-types:tacacs_hostp_key_type_t
    |             | +--rw secret-key-string? string
    |             +--ro state
    |               +--ro host-address?    cml-data-types:cml_hostname_t
    |               +--ro sequence-number  uint8
    |               +--ro port?           uint32
    |               +--ro timeout?        uint32
    |               +--ro key-type?       ipi-tacacs-types:tacacs_hostp_key_type_t
    |               +--ro secret-key-string? string

```

---

```

|      +--ro last-successful-authentication-time?  yang:date-and-time
|      +--ro counters
|          +--ro successful-authentications?  yang:counter64
|          +--ro authentication-failures?    yang:counter64
|          +--ro connection-failures?       yang:counter64
+--rw debug
  +--rw config
    | +--rw enable?  empty
  +--ro state
    +--ro enable?          empty
    +--ro terminal-debug-status?  cml-data-types:cml_on_off_t

```

rpcs:

```

+---x clear-all-tacacs-server-counters {feature-list:HAVE_HOSTPD}?
| +---w input
|   +---w vrf-name  string
+---x clear-tacacs-server-host-counters {feature-list:HAVE_HOSTPD}?
| +---w input
|   +---w hostname  cml-data-types:cml_hostname_t
|   +---w vrf-name  string
+---x tacacs-terminal-debug-on {feature-list:HAVE_HOSTPD}?
+---x tacacs-terminal-debug-off {feature-list:HAVE_HOSTPD}?

```

---

## module: ipi-telnet

```

+--rw telnet-server
  +--rw debug
    | +--rw config
    | | +--rw enable?  empty
    | +--ro state
    | +--ro enable?          empty
    | +--ro terminal-debug-status?  cml-data-types:cml_on_off_t
  +--rw vrfs
    +--rw vrf* [vrf-name]
      +--rw vrf-name  -> ../config/vrf-name
      +--rw config

```

```

| +--rw vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
| +--rw enable         boolean
| +--rw port?          uint32 {feature-list:HAVE_TELNET_SERVER}?
| +--rw session-limit? uint8 {feature-list:HAVE_TELNET_SERVER}?
+--ro state
  +--ro vrf-name?      -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-name
  +--ro enable         boolean
  +--ro port?          uint32 {feature-list:HAVE_TELNET_SERVER}?
  +--ro session-limit? uint8 {feature-list:HAVE_TELNET_SERVER}?

```

rpcs:

```

+---x telnet-terminal-debug-on {feature-list:HAVE_HOSTPD}?
+---x telnet-terminal-debug-off {feature-list:HAVE_HOSTPD}?

```

---

## module: ipi-tfo

```

+--rw trigger-failover
  +--rw config
    | +--rw admin-status? cml-data-types:cml_enable_disable_t
    +--ro state
      | +--ro admin-status? cml-data-types:cml_enable_disable_t
    +--rw interfaces
      | +--rw interface* [name]
      |   +--rw name      -> ../config/name
      |   +--rw config
      |     | +--rw name?    -> /ipi-interface:interfaces/interface/name
      |     | +--rw link-type? ipi-tfo-types:tfo_fog_link_type_t
      |     +--ro state
      |       | +--ro name?    -> /ipi-interface:interfaces/interface/name
      |       | +--ro link-type? ipi-tfo-types:tfo_fog_link_type_t
      |     +--rw tfo-groups
      |       +--rw tfo-group* [fog-id]
      |         +--rw fog-id  -> ../config/fog-id
      |         +--rw config
      |           | +--rw fog-id?   uint32

```

---

```

|      | +--rw group-type  ipi-tfo-types:tfo_fog_group_type_t
|      +--ro state
|      +--ro fog-id?      uint32
|      +--ro group-type  ipi-tfo-types:tfo_fog_group_type_t
+--rw failover-groups
  +--rw failover-group* [group-id]
    +--rw group-id  -> ../config/group-id
    +--rw config
      | +--rw group-id?      uint32
      | +--rw admin-status   cml-data-types:cml_enable_disable_t
      | +--rw failover-trigger-count?  uint32
      +--ro state
        | +--ro group-id?      uint32
        | +--ro admin-status   cml-data-types:cml_enable_disable_t
        | +--ro failover-trigger-count?  uint32
        | +--ro cpg-disable-status?  boolean
        | +--ro mpg-disable-status?  boolean
        +--ro counters
          +--ro mpg-link-failure-count?  uint64
          +--ro mpg-link-recover-count?  uint64
          +--ro cpg-auto-disable-count?  uint64
          +--ro cpg-auto-enable-count?  uint64

```

rpcs:

```

+---x tfo-clear-counters-all {feature-list:HAVE_TFO}?
+---x tfo-clear-fog-counters {feature-list:HAVE_TFO}?
  +---w input
    +---w group-id  uint32

```

---

## module: ipi-time-range

```

+--rw time-ranges
  +--rw time-range* [name]
    +--rw name      -> ../config/name
    +--rw config
      | +--rw name?  string

```

```
+--ro state
| +--ro name? string
+--rw start-time-options
| +--rw config
| | +--rw (start-time)?
| |   +--:(absolute-start-time)
| |     | +--rw absolute-start-time? time_range_date_time_t
| |     +--:(relative-start-time)
| |       +--rw relative-start-time? time_range_relative_time_t
| +--ro state
|   +--ro (start-time)?
|     +--:(absolute-start-time)
|       | +--ro absolute-start-time? time_range_date_time_t
|       +--:(relative-start-time)
|         +--ro relative-start-time? time_range_relative_time_t
+--rw end-time-options
| +--rw config
| | +--rw (end-time)?
| |   +--:(absolute-end-time)
| |     | +--rw absolute-end-time? time_range_date_time_t
| |     +--:(relative-end-time)
| |       +--rw relative-end-time? string
| +--ro state
|   +--ro (end-time)?
|     +--:(absolute-end-time)
|       | +--ro absolute-end-time? time_range_date_time_t
|       +--:(relative-end-time)
|         +--ro relative-end-time? string
+--rw frequency-options
  +--rw config
  | +--rw frequency? time_range_frequency_t
  +--ro state
    +--ro frequency? time_range_frequency_t
```



---

## module: ipi-udld

```

+--rw udld
  +--rw global
    | +--rw config
    | | +--rw enable?      empty
    | | +--rw message-time? uint8
    | +--ro state
    | +--ro enable?      empty
    | +--ro message-time? uint8
  +--rw debug
    | +--rw config
    | | +--rw options? ipi-udld-types:udld_debug_t
    | +--ro state
    | +--ro options?      ipi-udld-types:udld_debug_t
    | +--ro terminal-debug-status? ipi-udld-types:udld_debug_t
  +--rw interfaces
    +--rw interface* [name]
      +--rw name      -> ../config/name
      +--rw config
        | +--rw name?          -> /ipi-interface:interfaces/interface/name
        | +--rw mode?          ipi-udld-types:udld_mode_type_t
        | +--rw administrative-state? cml-data-types:cml_enable_disable_t
        +--ro state
          +--ro name?          -> /ipi-interface:interfaces/interface/name
          +--ro mode?          ipi-udld-types:udld_mode_type_t
          +--ro administrative-state? cml-data-types:cml_enable_disable_t
          +--ro link-state?      ipi-udld-types:udld_link_state_type_t

```

rpcs:

```

+---x udld-terminal-debug-on {feature-list:HAVE_UDLD}?
| +---w input
|   +---w terminal-debug-options ipi-udld-types:udld_debug_t
+---x udld-terminal-debug-off {feature-list:HAVE_UDLD}?
  +---w input
    +---w terminal-debug-options ipi-udld-types:udld_debug_t

```

---

## module: ipi-unicast-rpf

```
+--rw unicast-rpf {feature-list:HAVE_RPF}?
  +--rw global
    | +--rw config
    | | +--rw enable-route-lookup? empty
    | +--ro state
    | +--ro enable-route-lookup? empty
  +--rw interfaces
    +--rw interface* [name]
      +--rw name -> ../config/name
      +--rw config
        | +--rw name? -> /ipi-interface:interfaces/interface/name
        | +--rw source-reachability-mode ipi-unicast-rpf-types:urpf_src_reachability_mode_t
      +--ro state
        +--ro name? -> /ipi-interface:interfaces/interface/name
        +--ro source-reachability-mode ipi-unicast-rpf-types:urpf_src_reachability_mode_t
```

---

## module: ipi-user-management

```
+--rw user-management
  +--rw debug
    | +--rw config
    | | +--rw enable? empty
    | +--ro state
    | +--ro enable? empty
    | +--ro terminal-debug-status? cml-data-types:cml_on_off_t
  +--rw global
    | +--rw config
    | | +--rw disable-default-user? empty
    | +--ro state
    | +--ro disable-default-user? empty
```

```

+--rw users
+--rw user* [username]
+--rw username -> ../config/username
+--rw config
| +--rw username?          string
| +--rw role?              ipi-user-management-types:user_mgmt_role_types_t
| +--rw rbac-role?         ipi-user-management-types:user_mgmt_rbac_role_t {feature-list:HAVE_RBAC}?
| +--rw (password-type)?
|   +--:(plain-text)
|     | +--rw password?    string
|     +--:(hashed)
|       +--rw password-hashed? string
+--ro state
+--ro username?          string
+--ro role?              ipi-user-management-types:user_mgmt_role_types_t
+--ro rbac-role?         ipi-user-management-types:user_mgmt_rbac_role_t {feature-list:HAVE_RBAC}?
+--ro (password-type)?
+--:(plain-text)
| +--ro password?        string
+--:(hashed)
+--ro password-hashed? string

```

rpcs:

```

+---x user-management-terminal-debug-on {feature-list:HAVE_HOSTPD,feature-list:HAVE_USER_MGMT}?
+---x user-management-terminal-debug-off {feature-list:HAVE_HOSTPD,feature-list:HAVE_USER_MGMT}?

```

---

## module: ipi-user-session-management

```

+--rw user-session
+--rw line-console
| +--rw console* [console-id]
| +--rw console-id -> ../config/console-id
| +--rw config
| | +--rw privilege-level?      uint8
| | +--rw command-history-max-limit? uint32

```

---

```

| | +--rw console-id?          ipi-user-session-management-types:line_console_id_t
| +--ro state
| | +--ro privilege-level?      uint8
| | +--ro command-history-max-limit? uint32
| | +--ro console-id?          ipi-user-session-management-types:line_console_id_t
| +--rw timeout
|   +--rw config!
|     | +--rw minutes  uint32
|     | +--rw seconds? uint32
|     +--ro state
|       +--ro minutes  uint32
|       +--ro seconds? uint32
+--rw line-vty
| +--rw vty* [vty-id]
|   +--rw vty-id  -> ../config/vty-id
|   +--rw config
|     | +--rw privilege-level?      uint8
|     | +--rw command-history-max-limit? uint32
|     | +--rw vty-id?              cml-data-types:cml_range_t
|     +--ro state
|       | +--ro privilege-level?      uint8
|       | +--ro command-history-max-limit? uint32
|       | +--ro vty-id?              cml-data-types:cml_range_t
|       +--rw timeout
|         +--rw config!
|           | +--rw minutes  uint32
|           | +--rw seconds? uint32
|           +--ro state
|             +--ro minutes  uint32
|             +--ro seconds? uint32
+--ro sessions
  +--ro session* [id]
    +--ro id  -> ../state/id
    +--ro state
      +--ro id?      string
      +--ro line?    string

```

```

+--ro user-name?      string
+--ro client-type?    ipi-user-session-types:user_session_user_type_t
+--ro idle-time?      string
+--ro process-identifier? uint32
+--ro type?           ipi-user-session-types:user_session_type_t
+--ro user-role?      ipi-user-session-types:user_session_user_role_type_t
+--ro remote-ip?      string

```

rpcs:

```

+---x clear-line {feature-list:HAVE_IMI}?
+---w input
+---w line-name  string

```

---

## module: ipi-vlan-xc

```

+--rw cross-connects
+--rw cross-connect* [xconnect-name] {feature-list:HAVE_VLAN_XC}?
+--rw xconnect-name      -> ../config/xconnect-name
+--rw config
| +--rw xconnect-name?  string
| +--rw disable?       empty
+--ro state
| +--ro xconnect-name?  string
| +--ro disable?       empty
| +--ro admin-status?   ipi-vlan-xc-types:vlan_xc_admin_status_t
| +--ro oper-status?    ipi-vlan-xc-types:vlan_xc_oper_status_t
| +--ro ep1-rx-pkts?    yang:counter64
| +--ro ep1-rx-bytes?   yang:counter64
| +--ro ep1-tx-pkts?    yang:counter64
| +--ro ep1-tx-bytes?   yang:counter64
| +--ro ep2-rx-pkts?    yang:counter64
| +--ro ep2-rx-bytes?   yang:counter64

```

---

```

| +--ro ep2-tx-pkts?      yang:counter64
| +--ro ep2-tx-bytes?    yang:counter64
| +--ro bkp-ep1-rx-pkts? yang:counter64
| +--ro bkp-ep1-rx-bytes? yang:counter64
| +--ro bkp-ep1-tx-pkts? yang:counter64
| +--ro bkp-ep1-tx-bytes? yang:counter64
| +--ro bkp-ep2-rx-pkts? yang:counter64
| +--ro bkp-ep2-rx-bytes? yang:counter64
| +--ro bkp-ep2-tx-pkts? yang:counter64
| +--ro bkp-ep2-tx-bytes? yang:counter64
+--rw cross-connect-port
| +--rw config!
| | +--rw port-endpoint-1 -> /ipi-interface:interfaces/interface/name
| | +--rw port-endpoint-2 -> /ipi-interface:interfaces/interface/name
| +--ro state
|   +--ro port-endpoint-1 -> /ipi-interface:interfaces/interface/name
|   +--ro port-endpoint-2 -> /ipi-interface:interfaces/interface/name
|   +--ro ep1-rx-pkts?      yang:counter64
|   +--ro ep1-rx-bytes?    yang:counter64
|   +--ro ep1-tx-pkts?     yang:counter64
|   +--ro ep1-tx-bytes?    yang:counter64
|   +--ro ep2-rx-pkts?     yang:counter64
|   +--ro ep2-rx-bytes?    yang:counter64
|   +--ro ep2-tx-pkts?     yang:counter64
|   +--ro ep2-tx-bytes?    yang:counter64
|   +--ro bkp-ep1-rx-pkts? yang:counter64
|   +--ro bkp-ep1-rx-bytes? yang:counter64
|   +--ro bkp-ep1-tx-pkts? yang:counter64
|   +--ro bkp-ep1-tx-bytes? yang:counter64
|   +--ro bkp-ep2-rx-pkts? yang:counter64
|   +--ro bkp-ep2-rx-bytes? yang:counter64
|   +--ro bkp-ep2-tx-pkts? yang:counter64
|   +--ro bkp-ep2-tx-bytes? yang:counter64
+--rw cross-connect-port-specific
| +--rw config!
| | +--rw backup-endpoint-1?      string

```

---

---

```

| | +--rw backup-endpoint-2?      string
| | +--rw revertive?              empty
| | +--rw link-fault-pass-through-enable? empty
| +--ro state
|   +--ro backup-endpoint-1?      string
|   +--ro backup-endpoint-2?      string
|   +--ro revertive?              empty
|   +--ro link-fault-pass-through-enable? empty
+--rw cross-connect-vlan
  +--rw config!
  | +--rw vlan-endpoint-1 -> /ipi-interface:interfaces/interface/name
  | +--rw vlan-endpoint-2 -> /ipi-interface:interfaces/interface/name
  +--ro state
  | +--ro vlan-endpoint-1 -> /ipi-interface:interfaces/interface/name
  | +--ro vlan-endpoint-2 -> /ipi-interface:interfaces/interface/name
  +--rw vlan-xc-entries
    +--rw vlan-xc-entry* [outer-vlan-range inner-vlan-range]
      +--rw outer-vlan-range -> ../config/outer-vlan-range
      +--rw inner-vlan-range -> ../config/inner-vlan-range
      +--rw config
      | +--rw outer-vlan-range? string
      | +--rw inner-vlan-range? string
      +--ro state
      +--ro outer-vlan-range? string
      +--ro inner-vlan-range? string
      +--ro ep1-rx-pkts?      yang:counter64
      +--ro ep1-rx-bytes?     yang:counter64
      +--ro ep1-tx-pkts?      yang:counter64
      +--ro ep1-tx-bytes?     yang:counter64
      +--ro ep2-rx-pkts?      yang:counter64
      +--ro ep2-rx-bytes?     yang:counter64
      +--ro ep2-tx-pkts?      yang:counter64
      +--ro ep2-tx-bytes?     yang:counter64
      +--ro bkp-ep1-rx-pkts?   yang:counter64
      +--ro bkp-ep1-rx-bytes?  yang:counter64
      +--ro bkp-ep1-tx-pkts?   yang:counter64

```

```

+--ro bkp-ep1-tx-bytes? yang:counter64
+--ro bkp-ep2-rx-pkts? yang:counter64
+--ro bkp-ep2-rx-bytes? yang:counter64
+--ro bkp-ep2-tx-pkts? yang:counter64
+--ro bkp-ep2-tx-bytes? yang:counter64

```

rpcs:

```

+---x clear-cross-connect-counters {feature-list:HAVE_VLAN_XC}?
+---w input
+---w xc-name string

```

---

## module: ipi-vlan

```

+--rw vlan-classifier {feature-list:HAVE_VLAN_CLASS}?
| +--rw classifier-rules
| | +--rw classifier-rule* [rule-id]
| |   +--rw rule-id -> ../config/rule-id
| |   +--rw config
| |     | +--rw rule-id? uint16
| |     +--ro state
| |       | +--ro rule-id? uint16
| |       +--rw rule-criteria
| |         +--rw config
| |           | +--rw mac-address? cml-data-types:cml_mac_addr_t
| |           | +--rw ipv4-address? cml-data-types:cml_ipv4_prefix_t
| |           | +--rw ether-type? ipi-vlan-types:vlan_classifier_ethertype_t
| |           +--ro state
| |             +--ro mac-address? cml-data-types:cml_mac_addr_t
| |             +--ro ipv4-address? cml-data-types:cml_ipv4_prefix_t
| |             +--ro ether-type? ipi-vlan-types:vlan_classifier_ethertype_t
| +--rw classifier-groups
| | +--rw classifier-group* [group-id rule-id]
| |   +--rw group-id -> ../config/group-id
| |   +--rw rule-id -> ../config/rule-id
| |   +--rw config
| |     | +--rw group-id? uint8

```



```

| | | +--rw rule-id? -> /vlan-classifier/classifier-rules/classifier-rule/rule-id
| | +--ro state
| | +--ro group-id? uint8
| | +--ro rule-id? -> /vlan-classifier/classifier-rules/classifier-rule/rule-id
| +--rw ports
| +--rw port* [port-name group-id]
| +--rw port-name -> ../config/port-name
| +--rw group-id -> ../config/group-id
| +--rw config
| | +--rw port-name? -> /ipi-interface:interfaces/interface/name
| | +--rw group-id? -> /vlan-classifier/classifier-groups/classifier-group/group-id
| | +--rw vlan-id -> /ipi-network-instance:network-instances/network-instance/ipi-bridge:bridge/vlans/vlan/vlan-
id
| +--ro state
| +--ro port-name? -> /ipi-interface:interfaces/interface/name
| +--ro group-id? -> /vlan-classifier/classifier-groups/classifier-group/group-id
| +--ro vlan-id -> /ipi-network-instance:network-instances/network-instance/ipi-bridge:bridge/vlans/vlan/vlan-id
+--rw vlan-reservation {feature-list:HAVE_FLEXPORT,feature-list:NOT_HAVE_DUNE}?
| +--rw config
| | +--rw vlan-id? cml-data-types:cml_range_t {feature-list:NOT_HAVE_DUNE}?
| +--ro state
| +--ro vlan-id? cml-data-types:cml_range_t {feature-list:NOT_HAVE_DUNE}?
+--rw layer2-global
+--rw config
| +--rw disable-vlan-classifier-feature? empty {feature-list:HAVE_VLAN_CLASS}?
| +--rw disable-port-security? empty
| +--rw vlan-xlate-1? empty
+--ro state
+--ro disable-vlan-classifier-feature? empty {feature-list:HAVE_VLAN_CLASS}?
+--ro disable-port-security? empty
+--ro vlan-xlate-1? empty

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-bridge:bridge:
+--rw vlans
+--rw vlan* [vlan-id]
+--rw vlan-id -> ../config/vlan-id
+--rw config

```

---

```

| +--rw vlan-id?          cml-data-types:cml_range_t
| +--rw disable-mac-learning? empty
+--ro state
| +--ro vlan-id?          cml-data-types:cml_range_t
| +--ro disable-mac-learning? empty
+--rw customer-vlan
| +--rw config
| | +--rw type? ipi-vlan-types:cvlan_type_t
| | +--rw name? string
| | +--rw state? ipi-vlan-types:vlan_state_t
| +--ro state
| | +--ro type? ipi-vlan-types:cvlan_type_t
| | +--ro name? string
| | +--ro state? ipi-vlan-types:vlan_state_t
| | +--ro operational-status? ipi-vlan-types:vlan_oper_status_t
| | +--ro tagged-interface* string
+--rw service-vlan {feature-list:HAVE_PROVIDER_BRIDGE}?
| +--rw config
| | +--rw type? ipi-vlan-types:svlan_type_t
| | +--rw name? string
| | +--rw state? ipi-vlan-types:vlan_state_t
| +--ro state
| | +--ro type? ipi-vlan-types:svlan_type_t
| | +--ro name? string
| | +--ro state? ipi-vlan-types:vlan_state_t
| | +--ro operational-status? ipi-vlan-types:vlan_oper_status_t
| | +--ro tagged-interface* string
+--rw private-vlan {feature-list:HAVE_PVLAN}?
  +--rw config!
  | +--rw type ipi-vlan-types:vlan_pvlan_type_t
  +--ro state
  | +--ro type ipi-vlan-types:vlan_pvlan_type_t
  +--rw association
  +--rw config
  | +--rw secondary-vlan? cml-data-types:cml_range_t
  +--ro state

```

---

```

    +--ro secondary-vlan?  cml-data-types:cml_range_t
augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-bridge:bridge:
+--rw cvlan-registration-tables {feature-list:HAVE_VLAN,feature-list:HAVE_PROVIDER_BRIDGE}?
+--rw cvlan-registration-table* [table-name]
  +--rw table-name      -> ../config/table-name
  +--rw config
    | +--rw table-name?  string
  +--ro state
    | +--ro table-name?  string
  +--rw cvlan-mappings
    +--rw cvlan-mapping* [svlan-id cvlan-id]
      +--rw svlan-id  -> ../config/svlan-id
      +--rw cvlan-id  -> ../config/cvlan-id
      +--rw config
        | +--rw svlan-id?      uint16
        | +--rw cvlan-id?      cml-data-types:cml_range_t
        | +--rw untagged-ep?    ipi-vlan-types:cvlan_config_t
        | +--rw translated-cvlan-id?  uint16
        | +--rw svlan-cos?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
        | +--rw svlan-cfi?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
        | +--rw cvlan-cos?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
        | +--rw cvlan-cfi?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
      +--ro state
        +--ro svlan-id?      uint16
        +--ro cvlan-id?      cml-data-types:cml_range_t
        +--ro untagged-ep?    ipi-vlan-types:cvlan_config_t
        +--ro translated-cvlan-id?  uint16
        +--ro svlan-cos?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
        +--ro svlan-cfi?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
        +--ro cvlan-cos?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?
        +--ro cvlan-cfi?      uint8 {feature-list:NOT_HAVE_CUSTOM2_QOS,feature-
list:NOT_HAVE_CUSTOM4_QOS}?

```

---

## module: ipi-vrf

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance:

```

+--rw vrf
  +--rw config
    | +--rw vrf-name?          -> /ipi-network-instance:network-instances/network-instance/instance-name
    | +--rw description?      cml-data-types:cml_line_t
    | +--rw router-id?        inet:ipv4-address
    | +--rw evpn-layer3-network-id? uint32 {feature-list:HAVE_BGP_EVPN,feature-list:HAVE_NVO}?
    | +--rw mtu?              uint32 {feature-list:HAVE_BGP_EVPN,feature-list:HAVE_NVO}?
    +--ro state
      | +--ro vrf-name?        -> /ipi-network-instance:network-instances/network-instance/instance-name
      | +--ro description?     cml-data-types:cml_line_t
      | +--ro router-id?       inet:ipv4-address
      | +--ro evpn-layer3-network-id? uint32 {feature-list:HAVE_BGP_EVPN,feature-list:HAVE_NVO}?
      | +--ro mtu?             uint32 {feature-list:HAVE_BGP_EVPN,feature-list:HAVE_NVO}?
      | +--ro vrf-id?          uint32
      | +--ro fib-id?          uint32
      +--rw snmp {feature-list:HAVE_SNMP}?
        +--rw config
          | +--rw snmp-context-name? string
        +--ro state
          +--ro snmp-context-name? string

```

rpcs:

```

+---x clear-default-router-id {feature-list:HAVE_L3}?
+---x clear-vrf-router-id {feature-list:HAVE_VRF}?
+---w input
  +---w vrfName  string

```

---

## module: ipi-vrrp

```
+--rw vrrp
  +--rw global
    | +--rw config
    | | +--rw disable-virtual-router-mac-address? empty
    | | +--rw vrrp-v2-compatible? empty
    | | +--rw ipv4-exclude-pseudo-header? empty
    | +--ro state
    | | +--ro disable-virtual-router-mac-address? empty
    | | +--ro vrrp-v2-compatible? empty
    | | +--ro ipv4-exclude-pseudo-header? empty
    | | +--ro notification-control? empty
    | +--ro session
    | | +--ro state
    | | | +--ro session-table-maximum? uint32
    | | | +--ro session-table-size? uint32
    | | | +--ro ipv4-session-count? uint32
    | | | +--ro ipv6-session-count? uint32
    | +--ro new-master
    | | +--ro operational-master-address? inet:ip-address
    | | +--ro virtual-router-id? uint8
    | | +--ro new-master-reason? ipi-vrrp-types:vrrp_new_master_reason_t
    | | +--ro uptime? string
    | +--ro protocol-error
    | | +--ro operational-master-address? inet:ip-address
    | | +--ro virtual-router-id? uint8
    | | +--ro error-reason? ipi-vrrp-types:vrrp_error_reason_t
    | | +--ro uptime? string
    | +--ro packet-error
    | | +--ro error-reason? ipi-vrrp-types:vrrp_error_reason_t
```

```

| +--ro errors
|   +--ro state
|     +--ro checksum-error?      yang:counter64
|     +--ro version-error?       yang:counter64
|     +--ro invalid-virtual-router-id? yang:counter64
+--rw debug
| +--rw config
| | +--rw options? ipi-vrrp-types:vrrp_debug_t
| +--ro state
|   +--ro options?      ipi-vrrp-types:vrrp_debug_t
|   +--ro terminal-debug-status? ipi-vrrp-types:vrrp_debug_t
+--rw ipv4-instances
| +--rw ipv4-instance* [virtual-router-id]
|   +--rw virtual-router-id -> ../config/virtual-router-id
|   +--rw config
|     | +--rw virtual-router-id? uint8
|     +--ro state
|       | +--ro virtual-router-id? uint8
|     +--rw interfaces
|       +--rw interface* [interface-name]
|         +--rw interface-name -> ../config/interface-name
|         +--rw config
|           | +--rw interface-name? -> /ipi-interface:interfaces/interface/name
|           | +--rw disable-preempt-mode? empty
|           | +--rw priority?      uint8
|           | +--rw preempt-delay? uint32
|           | +--rw advertisement-interval? uint16
|           | +--rw disable-accept-mode? empty
|           | +--rw vrrp-v2-compatible? empty
|           | +--rw ipv4-exclude-pseudo-header? empty
|           | +--rw authentication-data? string
|           | +--rw primary-ip-address?   inet:ipv4-address
|           | +--rw mlag-active-standby?  empty {feature-list:HAVE_MLAG}?
|           +--ro state
|             | +--ro interface-name? -> /ipi-interface:interfaces/interface/name
|             | +--ro disable-preempt-mode? empty

```

---

```

|      | +--ro priority?          uint8
|      | +--ro preempt-delay?     uint32
|      | +--ro advertisement-interval?  uint16
|      | +--ro disable-accept-mode?     empty
|      | +--ro vrrp-v2-compatible?     empty
|      | +--ro ipv4-exclude-pseudo-header?  empty
|      | +--ro authentication-data?     string
|      | +--ro primary-ip-address?     inet:ipv4-address
|      | +--ro mlag-active-standby?     empty {feature-list:HAVE_MLAG}?
|      +--rw protocol-enable
|      | +--rw config
|      | | +--rw enable?  empty
|      | | +--ro state
|      | |   +--ro enable?  empty
|      +--rw virtual-ip
|      | +--rw config!
|      | | +--rw virtual-ip-address  inet:ipv4-address
|      | | +--rw ip-address-owner    boolean
|      | | +--ro state
|      | |   +--ro virtual-ip-address  inet:ipv4-address
|      | |   +--ro ip-address-owner    boolean
|      +--rw interfaces-tracking
|      | +--rw interface-tracking* [interface-tracking-name]
|      |   +--rw interface-tracking-name  -> ../config/interface-tracking-name
|      |   +--rw config
|      |   | +--rw interface-tracking-name?  -> /ipi-interface:interfaces/interface/name
|      |   | +--rw priority-decrement      uint8
|      |   | +--ro state
|      |   |   +--ro interface-tracking-name?  -> /ipi-interface:interfaces/interface/name
|      |   |   +--ro priority-decrement      uint8
|      |   |   +--ro interface-status?      ipi-vrrp-types:vrrp_iface_status_t
|      |   |   +--ro interface-down-events?  uint32
|      +--ro addresses
|      | +--ro state
|      |   +--ro operational-primary-address?  inet:ipv4-address
|      |   +--ro operational-master-address?  inet:ipv4-address

```

---

---

```
|      +--ro session-info
|      | +--ro state
|      |   +--ro multicast-membership?   ipi-vrrp-types:vrrp_member_state_t
|      |   +--ro address-family?         ipi-vrrp-types:vrrp_addr_family_t
|      |   +--ro running-priority?       uint8
|      |   +--ro virtual-mac-mbyte-word? cml-data-types:cml_mac_addr_t
|      |   +--ro administrative-state?   ipi-vrrp-types:vrrp_admin_state_t
|      |   +--ro init-message-code?     ipi-vrrp-types:vrrp_init_message_code_t
|      +--ro reasons
|      | +--ro state
|      |   +--ro new-master-reason? ipi-vrrp-types:vrrp_new_master_reason_t
|      +--ro session-status
|      | +--ro state
|      |   +--ro vrrp-state?           ipi-vrrp-types:vrrp_session_state_t
|      |   +--ro virtual-address-status? ipi-vrrp-types:vrrp_ip_status_t
|      +--ro timers
|      | +--ro state
|      |   +--ro switchback-delay-timer? uint32
|      |   +--ro countdown-timer?       uint32
|      |   +--ro skew-time?             uint32
|      |   +--ro garp-packet-delay?     uint32
|      |   +--ro master-advertise-interval? uint32
|      |   +--ro refresh-rate-interval?  uint32
|      +--ro statistics
|      | +--ro state
|      |   +--ro transitions-to-master?   yang:counter64
|      |   +--ro advertise-received?      yang:counter64
|      |   +--ro priority-zero-received-packets? yang:counter64
|      |   +--ro priority-zero-sent-packets? yang:counter64
|      |   +--ro disconnection-time?      string
|      |   +--ro monitored-circuit-up-events? yang:counter64
|      |   +--ro monitored-circuit-down-events? yang:counter64
|      +--ro errors
|      | +--ro state
|      |   +--ro ttl-error-packets?      yang:counter64
|      |   +--ro invalid-type-packets?   yang:counter64
```

---



---

```

|      |  +--ro address-list-errors?      yang:counter64
|      |  +--ro invalid-authentication-type?  yang:counter64
|      |  +--ro authentication-type-mismatch?  yang:counter64
|      |  +--ro wrong-authentication-password?  yang:counter64
|      |  +--ro address-mismatch-packets?      yang:counter64
|      |  +--ro packet-length-errors?          yang:counter64
|      +--rw objects-tracking {feature-list:HAVE_OBJ_TRACKING}?
|          +--rw object-tracking* [tracking-id]
|              +--rw tracking-id  -> ../config/tracking-id
|              +--rw config
|                  | +--rw tracking-id?  uint16
|                  | +--rw decrement    uint8
|                  +--ro state
|                      +--ro tracking-id?      uint16
|                      +--ro decrement        uint8
|                      +--ro object-status?    ipi-vrrp-types:vrrp_iface_status_t
|                      +--ro object-down-events? uint32
+--rw ipv6-instances
    +--rw ipv6-instance* [virtual-router-id]
        +--rw virtual-router-id  -> ../config/virtual-router-id
        +--rw config
            | +--rw virtual-router-id?  uint8
            +--ro state
            | +--ro virtual-router-id?  uint8
        +--rw interfaces
            +--rw interface* [interface-name]
                +--rw interface-name      -> ../config/interface-name
                +--rw config
                    | +--rw interface-name?      -> /ipi-interface:interfaces/interface/name
                    | +--rw disable-preempt-mode?  empty
                    | +--rw priority?            uint8
                    | +--rw preempt-delay?        uint32
                    | +--rw advertisement-interval? uint16
                    | +--rw disable-accept-mode?  empty
                    | +--rw primary-ip-address?   inet:ipv6-address
                    +--ro state

```

---

```
| +--ro interface-name?      -> /ipi-interface:interfaces/interface/name
| +--ro disable-preempt-mode? empty
| +--ro priority?           uint8
| +--ro preempt-delay?      uint32
| +--ro advertisement-interval? uint16
| +--ro disable-accept-mode? empty
| +--ro primary-ip-address?  inet:ipv6-address
+--rw protocol-enable
| +--rw config
| | +--rw enable? empty
| +--ro state
|   +--ro enable? empty
+--rw virtual-ip-addresses {feature-list:HAVE_IPV6}?
| +--rw virtual-ip-address* [virtual-ip-address]
|   +--rw virtual-ip-address -> ../config/virtual-ip-address
|   +--rw config
|     | +--rw virtual-ip-address? inet:ipv6-address
|     | +--rw ip-address-owner?  boolean
|     +--ro state
|       +--ro virtual-ip-address? inet:ipv6-address
|       +--ro ip-address-owner?  boolean
+--rw interfaces-tracking
| +--rw interface-tracking* [interface-tracking-name]
|   +--rw interface-tracking-name -> ../config/interface-tracking-name
|   +--rw config
|     | +--rw interface-tracking-name? -> /ipi-interface:interfaces/interface/name
|     | +--rw priority-decrement      uint8
|     +--ro state
|       +--ro interface-tracking-name? -> /ipi-interface:interfaces/interface/name
|       +--ro priority-decrement      uint8
|       +--ro interface-status?       ipi-vrrp-types:vrrp_iface_status_t
|       +--ro interface-down-events?  uint32
+--ro addresses
| +--ro state
|   +--ro operational-primary-ipv6?  inet:ipv6-address
|   +--ro operational-master-ipv6?  inet:ipv6-address
```

---

```
+--ro session-info
| +--ro state
|   +--ro multicast-membership?   ipi-vrrp-types:vrrp_member_state_t
|   +--ro address-family?         ipi-vrrp-types:vrrp_addr_family_t
|   +--ro running-priority?       uint8
|   +--ro virtual-mac-mbyte-word? cml-data-types:cml_mac_addr_t
|   +--ro administrative-state?   ipi-vrrp-types:vrrp_admin_state_t
|   +--ro init-message-code?      ipi-vrrp-types:vrrp_init_message_code_t
+--ro reasons
| +--ro state
|   +--ro new-master-reason? ipi-vrrp-types:vrrp_new_master_reason_t
+--ro session-status
| +--ro state
|   +--ro vrrp-state?          ipi-vrrp-types:vrrp_session_state_t
|   +--ro virtual-address-status? ipi-vrrp-types:vrrp_ip_status_t
+--ro timers
| +--ro state
|   +--ro switchback-delay-timer? uint32
|   +--ro countdown-timer?        uint32
|   +--ro skew-time?              uint32
|   +--ro garp-packet-delay?      uint32
|   +--ro master-advertise-interval? uint32
|   +--ro refresh-rate-interval?  uint32
+--ro statistics
| +--ro state
|   +--ro transitions-to-master?   yang:counter64
|   +--ro advertise-received?      yang:counter64
|   +--ro priority-zero-received-packets? yang:counter64
|   +--ro priority-zero-sent-packets? yang:counter64
|   +--ro disconnection-time?      string
|   +--ro monitored-circuit-up-events? yang:counter64
|   +--ro monitored-circuit-down-events? yang:counter64
+--ro errors
| +--ro state
|   +--ro ttl-error-packets?       yang:counter64
|   +--ro invalid-type-packets?    yang:counter64
```

---

```

|   +--ro address-list-errors?      yang:counter64
|   +--ro invalid-authentication-type? yang:counter64
|   +--ro authentication-type-mismatch? yang:counter64
|   +--ro wrong-authentication-password? yang:counter64
|   +--ro address-mismatch-packets?  yang:counter64
|   +--ro packet-length-errors?      yang:counter64
+--rw objects-tracking {feature-list:HAVE_OBJ_TRACKING}?
  +--rw object-tracking* [tracking-id]
    +--rw tracking-id  -> ../config/tracking-id
    +--rw config
      | +--rw tracking-id?  uint16
      | +--rw decrement    uint8
    +--ro state
      +--ro tracking-id?    uint16
      +--ro decrement      uint8
      +--ro object-status?  ipi-vrrp-types:vrrp_iface_status_t
      +--ro object-down-events? uint32

```

rpcs:

```

+---x vrrp-snmp-restart {feature-list:HAVE_SNMP}?
+---x vrrp-clear-statistics {feature-list:HAVE_VRRPD}?
+---x vrrp-clear-ipv4-statistics {feature-list:HAVE_VRRPD}?
+---x vrrp-clear-ipv6-statistics {feature-list:HAVE_VRRPD}?
+---x vrrp-clear-session-ipv4-statistics {feature-list:HAVE_VRRPD}?
| +---w input
|   +---w vrrp-id      uint8
|   +---w interface-name string
+---x vrrp-clear-session-ipv6-statistics {feature-list:HAVE_VRRPD}?
| +---w input
|   +---w vrrp-id      uint8
|   +---w interface-name string
+---x vrrp-terminal-debug-all-on {feature-list:HAVE_VRRPD}?
+---x vrrp-terminal-debug-all-off {feature-list:HAVE_VRRPD}?
+---x vrrp-terminal-debug-on {feature-list:HAVE_VRRPD}?
| +---w input
|   +---w terminal-debug-options ipi-vrrp-types:vrrp_debug_t

```

```

+---x vrrp-terminal-debug-off {feature-list:HAVE_VRRPD}?
  +---w input
    +---w terminal-debug-options   ipi-vrrp-types:vrrp_debug_t

```

notifications:

```

+---n vrrp-new-master
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro operational-master-address?  inet:ip-address
| +--ro virtual-router-id?   uint8
| +--ro new-master-reason?    ipi-vrrp-types:vrrp_new_master_reason_t
| +--ro uptime?            string
+---n vrrp-protocol-error
| +--ro severity?          cml-data-types:cml_notif_severity_t
| +--ro eventClass?        cml-data-types:cml_notif_class_t
| +--ro operational-master-address?  inet:ip-address
| +--ro virtual-router-id?   uint8
| +--ro error-reason?       ipi-vrrp-types:vrrp_error_reason_t
| +--ro uptime?            string
+---n vrrp-packet-error
  +--ro severity?    cml-data-types:cml_notif_severity_t
  +--ro eventClass?  cml-data-types:cml_notif_class_t
  +--ro error-reason? ipi-vrrp-types:vrrp_error_reason_t

```

---

## module: ipi-vxlan

```

+--rw vxlan
  +--rw global
    | +--rw config!
    | | +--rw enable-vxlan          empty
    | | +--rw vtep-ipv4?            inet:ipv4-address
    | | +--rw mac-ageing-timer?      uint32
    | | +--rw arp-nd-refresh-timer?  uint32 {feature-list:HAVE_BGP_EVPN}?
    | | +--rw mac-address?          cml-data-types:cml_mac_addr_t {feature-list:HAVE_BGP_EVPN}?

```

---

```

| | +--rw maximum-cache-disable-count?      uint16 {feature-list:HAVE_BGP_EVPN,feature-
list:NOT_HAVE_DUNE}?
| | +--rw disable-arp-storm-control-for-cpu?  empty {feature-list:NOT_HAVE_DUNE}?
| | +--rw mh-mac-relocate-scan?              ipi-vxlan-types:vxlan_mac_relocate_t {feature-list:NOT_HAVE_DUNE}?
| +--ro state
|   +--ro enable-vxlan                      empty
|   +--ro vtep-ipv4?                       inet:ipv4-address
|   +--ro mac-ageing-timer?                 uint32
|   +--ro arp-nd-refresh-timer?             uint32 {feature-list:HAVE_BGP_EVPN}?
|   +--ro mac-address?                     cml-data-types:cml_mac_addr_t {feature-list:HAVE_BGP_EVPN}?
|   +--ro maximum-cache-disable-count?      uint16 {feature-list:HAVE_BGP_EVPN,feature-
list:NOT_HAVE_DUNE}?
|   +--ro disable-arp-storm-control-for-cpu? empty {feature-list:NOT_HAVE_DUNE}?
|   +--ro mh-mac-relocate-scan?            ipi-vxlan-types:vxlan_mac_relocate_t {feature-list:NOT_HAVE_DUNE}?
+--rw qos-tunnel-mappings
| +--rw qos-tunnel-mapping* [qos-map-mode traffic-direction] {feature-list:HAVE_QOS}?
|   +--rw qos-map-mode      -> ../config/qos-map-mode
|   +--rw traffic-direction -> ../config/traffic-direction
|   +--rw config
|     | +--rw traffic-direction? ipi-vxlan-types:vxlan_qos_dir_t
|     | +--rw qos-map-mode?      ipi-vxlan-types:vxlan_qos_global_mode_t
|     | +--rw profile-name      string
|     +--ro state
|       +--ro traffic-direction? ipi-vxlan-types:vxlan_qos_dir_t
|       +--ro qos-map-mode?      ipi-vxlan-types:vxlan_qos_global_mode_t
|       +--ro profile-name      string
+--rw vxlan-tenants
| +--rw vxlan-tenant* [vxlan-identifier]
|   +--rw vxlan-identifier -> ../config/vxlan-identifier
|   +--rw config
|     | +--rw vrf-name?          -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name {feature-list:HAVE_BGP_EVPN}?
|     | +--rw map-network*      string
|     | +--rw mac-hold-timer?   int32 {feature-list:HAVE_BGP_EVPN}?
|     | +--rw tenant-description? string
|     | +--rw irb-name?         -> /ipi-interface:interfaces/interface/name {feature-list:HAVE_BGP_EVPN}?
|     | +--rw disable-l3-termination? cml-data-types:cml_mac_addr_t {feature-list:NOT_HAVE_DUNE}?

```

---

```

| | +--rw vxlan-identifier?      uint32
| | +--rw tenant-type?          ipi-vxlan-types:vxlan_tenant_type_t
| | +--rw tenant-type-bridge?   ipi-vxlan-types:vxlan_tenant_type_bridge_t
| | +--rw bridge-vlan-id?       -> /ipi-network-instance:network-instances/network-instance/ipi-bridge:bridge/ipi-
vlan:vlan:vlan-id {feature-list:NOT_HAVE_DUNE}?
| | +--rw etree-leaf?          empty
| | +--rw tenant-xconnect-type?  ipi-vxlan-types:vxlan_tenant_xconnect_type_t
| +--ro state
| | +--ro vrf-name?             -> /ipi-network-instance:network-instances/network-instance/ipi-vrf:vrf/config/vrf-
name {feature-list:HAVE_BGP_EVPN}?
| | +--ro map-network*          string
| | +--ro mac-hold-timer?       int32 {feature-list:HAVE_BGP_EVPN}?
| | +--ro tenant-description?   string
| | +--ro irb-name?            -> /ipi-interface:interfaces/interface/name {feature-list:HAVE_BGP_EVPN}?
| | +--ro disable-l3-termination? cml-data-types:cml_mac_addr_t {feature-list:NOT_HAVE_DUNE}?
| | +--ro vxlan-identifier?     uint32
| | +--ro tenant-type?          ipi-vxlan-types:vxlan_tenant_type_t
| | +--ro tenant-type-bridge?   ipi-vxlan-types:vxlan_tenant_type_bridge_t
| | +--ro bridge-vlan-id?       -> /ipi-network-instance:network-instances/network-instance/ipi-bridge:bridge/ipi-
vlan:vlan:vlan-id {feature-list:NOT_HAVE_DUNE}?
| | +--ro etree-leaf?          empty
| | +--ro tenant-xconnect-type?  ipi-vxlan-types:vxlan_tenant_xconnect_type_t
| +--ro route-count-info
| | +--ro state
| |   +--ro total?      uint32
| |   +--ro mac-only?   uint32
| |   +--ro mac-ipv4?   uint32
| |   +--ro mac-ipv6?   uint32 {feature-list:HAVE_IPV6}?
| +--rw irb
| | +--rw config
| | | +--rw irb-advertise-host-route? empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro state
| |   +--ro irb-advertise-host-route? empty {feature-list:HAVE_BGP_EVPN}?
| +--rw static-tenants
| | +--rw static-tenant* [mac-address]
| |   +--rw mac-address -> ../config/mac-address
| |   +--rw config

```

---

```

| | | +--rw mac-address?      cml-data-types:cml_mac_addr_t
| | | +--rw remote-vtep-ipv4  inet:ipv4-address
| |   +--ro state
| |     +--ro mac-address?      cml-data-types:cml_mac_addr_t
| |     +--ro remote-vtep-ipv4  inet:ipv4-address
| +--ro arp-cache-info* [host-ip]
| | +--ro host-ip  -> ../state/host-ip
| | +--ro state
| |   +--ro host-ip?      inet:ipv4-address
| |   +--ro host-mac?      cml-data-types:cml_mac_addr_t
| |   +--ro host-type?     ipi-vxlan-types:vxlan_host_t
| |   +--ro interface-index? uint32
| +--ro nd-cache-info* [host-ip]
| | +--ro host-ip  -> ../state/host-ip
| | +--ro state
| |   +--ro host-ip?      inet:ipv6-address
| |   +--ro host-mac?      cml-data-types:cml_mac_addr_t
| |   +--ro host-type?     ipi-vxlan-types:vxlan_host_t
| |   +--ro interface-index? uint32
| +--ro mac-table-info* [mac-address]
| | +--ro mac-address  -> ../state/mac-address
| | +--ro state
| |   +--ro mac-address?      cml-data-types:cml_mac_addr_t
| |   +--ro interface-name?    -> /ipi-interface:interfaces/interface/name
| |   +--ro vlan-id?           string
| |   +--ro inner-vlan-id?      uint32
| |   +--ro vtep-ip-esi?       string
| |   +--ro host-type?         ipi-vxlan-types:vxlan_host_t
| |   +--ro host-status?       ipi-vxlan-types:vxlan_host_status_t
| |   +--ro access-port-description? string
| +--ro static-host-info* [mac-address host-ipv4]
| | +--ro mac-address  -> ../state/mac-address
| | +--ro host-ipv4    -> ../state/host-ipv4
| | +--ro state
| |   +--ro mac-address?      cml-data-types:cml_mac_addr_t
| |   +--ro static-host-state? ipi-vxlan-types:vxlan_static_host_state_t

```

---



---

```

| | +--ro host-ipv4?      inet:ipv4-address
| +--ro static-host-ipv6-info* [mac-address host-ipv6]
|   +--ro mac-address    -> ../state/mac-address
|   +--ro host-ipv6      -> ../state/host-ipv6
|   +--ro state
|     +--ro mac-address?   cml-data-types:cml_mac_addr_t
|     +--ro static-host-state? ipi-vxlan-types:vxlan_static_host_state_t
|     +--ro host-ipv6?     inet:ipv6-address {feature-list:HAVE_IPV6}?
+--ro tunnel* [destination-vtep-ip]
| +--ro destination-vtep-ip -> ../state/destination-vtep-ip
| +--ro state
|   +--ro destination-vtep-ip? inet:ipv4-address
|   +--ro source-vtep-ip?      inet:ipv4-address
|   +--ro up-down-time?        yang:timeticks
|   +--ro tunnel-status?       ipi-vxlan-types:vxlan_tunnel_status_t
|   +--ro counters
|     +--ro out-bytes?          yang:counter64
|     +--ro out-packets?        yang:counter64
|     +--ro in-bytes?           yang:counter64
|     +--ro in-packets?         yang:counter64
|     +--ro tx-arp-discard-packets? yang:counter64
|     +--ro tx-nd-discard-packets? yang:counter64
|     +--ro tx-arp-request-packets? yang:counter64
|     +--ro tx-arp-reply-packets?  yang:counter64
|     +--ro tx-neighbor-solicitation-packets? yang:counter64
|     +--ro tx-neighbor-advertisement-packets? yang:counter64
|     +--ro tx-garp-packets?      yang:counter64
|     +--ro tx-gna-packets?       yang:counter64
+--rw untagged-access-interfaces
| +--rw untagged-access-interface* [untagged-interface-name] {feature-list:NOT_HAVE_DNX}?
|   +--rw untagged-interface-name      -> ../config/untagged-interface-name
|   +--rw config
|     | +--rw interface-name?      -> /ipi-interface:interfaces/interface/name
|     | +--rw admin-shutdown?      empty
|     | +--rw description?         cml-data-types:cml_line_t
|     | +--rw dynamic-learning-disable? empty

```

---

---

```

| | +--rw access-mac-hold-time?    int32
| | +--rw arp-nd-flood-suppress?   empty {feature-list:HAVE_BGP_EVPN}?
| | +--rw garp-gna-enable?         empty {feature-list:HAVE_BGP_EVPN}?
| | +--rw mac-address*             cml-data-types:cml_mac_addr_t
| | +--rw default-access-interface? empty
| | +--rw untagged-interface-name?  -> /ipi-interface:interfaces/interface/name
| +--ro state
| | +--ro interface-name?          -> /ipi-interface:interfaces/interface/name
| | +--ro admin-shutdown?          empty
| | +--ro description?             cml-data-types:cml_line_t
| | +--ro dynamic-learning-disable? empty
| | +--ro access-mac-hold-time?    int32
| | +--ro arp-nd-flood-suppress?   empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro garp-gna-enable?         empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro mac-address*             cml-data-types:cml_mac_addr_t
| | +--ro default-access-interface? empty
| | +--ro untagged-interface-name?  -> /ipi-interface:interfaces/interface/name
| +--rw cache
| | +--rw config
| | | +--rw arp-cache-disable?     empty {feature-list:HAVE_BGP_EVPN}?
| | | +--rw nd-cache-disable?      empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro state
| |   +--ro arp-cache-disable?     empty {feature-list:HAVE_BGP_EVPN}?
| |   +--ro nd-cache-disable?      empty {feature-list:HAVE_BGP_EVPN}?
| +--rw map
| | +--rw config
| | | +--rw vxlan-identifier?       -> /vxlan/vxlan-tenants/vxlan-tenant/config/vxlan-identifier
| | | +--rw tenant-description?     -> /vxlan/vxlan-tenants/vxlan-tenant/config/tenant-description
| | +--ro state
| |   +--ro vxlan-identifier?       -> /vxlan/vxlan-tenants/vxlan-tenant/config/vxlan-identifier
| |   +--ro tenant-description?     -> /vxlan/vxlan-tenants/vxlan-tenant/config/tenant-description
| +--rw host-macs-ipv4
| | +--rw host-mac-ipv4* [mac-address ipv4-address] {feature-list:NOT_HAVE_DNX}?
| |   +--rw mac-address             -> ../config/mac-address
| |   +--rw ipv4-address             -> ../config/ipv4-address
| |   +--rw config

```

---

```

| | | +--rw mac-address?  cml-data-types:cml_mac_addr_t
| | | +--rw ipv4-address?  inet:ipv4-address
| |   +--ro state
| |     +--ro mac-address?  cml-data-types:cml_mac_addr_t
| |     +--ro ipv4-address?  inet:ipv4-address
| +--rw host-macs-ipv6
| | +--rw host-mac-ipv6* [mac-address ipv6-address] {feature-list:HAVE_IPV6,feature-list:NOT_HAVE_DNX}?
| |   +--rw mac-address    -> ../config/mac-address
| |   +--rw ipv6-address   -> ../config/ipv6-address
| |   +--rw config
| |     | +--rw mac-address?  cml-data-types:cml_mac_addr_t
| |     | +--rw ipv6-address?  inet:ipv6-address
| |     | +--ro state
| |     |   +--ro mac-address?  cml-data-types:cml_mac_addr_t
| |     |   +--ro ipv6-address?  inet:ipv6-address
| +--rw access-interface-qos-type-mappings
|   +--rw access-interface-qos-type-mapping* [profile-map-type] {feature-list:HAVE_QOS}?
|     +--rw profile-map-type  -> ../config/profile-map-type
|     +--rw config
|       | +--rw profile-map-type?  ipi-vxlan-types:vxlan_qos_map_profile_type_t
|       | +--rw profile-name      string
|       +--ro state
|         +--ro profile-map-type?  ipi-vxlan-types:vxlan_qos_map_profile_type_t
|         +--ro profile-name      string
+--rw tagged-access-interfaces
| +--rw tagged-access-interface* [interface-name vlan-identifier] {feature-list:NOT_HAVE_DNX}?
|   +--rw interface-name          -> ../config/interface-name
|   +--rw vlan-identifier         -> ../config/vlan-identifier
|   +--rw config
|     | +--rw tag-protocol-identifier?  string
|     | +--rw interface-name?          -> /ipi-interface:interfaces/interface/name
|     | +--rw admin-shutdown?          empty
|     | +--rw description?             cml-data-types:cml_line_t
|     | +--rw dynamic-learning-disable? empty
|     | +--rw access-mac-hold-time?    int32
|     | +--rw arp-nd-flood-suppress?   empty {feature-list:HAVE_BGP_EVPN}?

```

---

```

| | +--rw garp-gna-enable?      empty {feature-list:HAVE_BGP_EVPN}?
| | +--rw mac-address*          cml-data-types:cml_mac_addr_t
| | +--rw vlan-identifier?      string
| +--ro state
| | +--ro tag-protocol-identifier? string
| | +--ro interface-name?       -> /ipi-interface:interfaces/interface/name
| | +--ro admin-shutdown?       empty
| | +--ro description?          cml-data-types:cml_line_t
| | +--ro dynamic-learning-disable? empty
| | +--ro access-mac-hold-time?  int32
| | +--ro arp-nd-flood-suppress? empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro garp-gna-enable?      empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro mac-address*          cml-data-types:cml_mac_addr_t
| | +--ro vlan-identifier?      string
| +--rw cache
| | +--rw config
| | | +--rw arp-cache-disable?  empty {feature-list:HAVE_BGP_EVPN}?
| | | +--rw nd-cache-disable?   empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro state
| | | +--ro arp-cache-disable?  empty {feature-list:HAVE_BGP_EVPN}?
| | | +--ro nd-cache-disable?   empty {feature-list:HAVE_BGP_EVPN}?
| +--rw map
| | +--rw config
| | | +--rw vxlan-identifier?    -> /vxlan/vxlan-tenants/vxlan-tenant/config/vxlan-identifier
| | | +--rw tenant-description?  -> /vxlan/vxlan-tenants/vxlan-tenant/config/tenant-description
| | +--ro state
| | | +--ro vxlan-identifier?    -> /vxlan/vxlan-tenants/vxlan-tenant/config/vxlan-identifier
| | | +--ro tenant-description?  -> /vxlan/vxlan-tenants/vxlan-tenant/config/tenant-description
| +--rw host-macs-ipv4
| | +--rw host-mac-ipv4* [mac-address ipv4-address]
| | | +--rw mac-address         -> ../config/mac-address
| | | +--rw ipv4-address        -> ../config/ipv4-address
| | +--rw config
| | | +--rw mac-address?        cml-data-types:cml_mac_addr_t
| | | +--rw ipv4-address?       inet:ipv4-address
| | +--ro state

```

---

---

```

| |   +--ro mac-address?   cml-data-types:cml_mac_addr_t
| |   +--ro ipv4-address?  inet:ipv4-address
| +--rw host-macs-ipv6
| | +--rw host-mac-ipv6* [mac-address ipv6-address] {feature-list:HAVE_IPV6}?
| |   +--rw mac-address    -> ../config/mac-address
| |   +--rw ipv6-address   -> ../config/ipv6-address
| |   +--rw config
| | | +--rw mac-address?   cml-data-types:cml_mac_addr_t
| | | +--rw ipv6-address?  inet:ipv6-address
| |   +--ro state
| |   +--ro mac-address?   cml-data-types:cml_mac_addr_t
| |   +--ro ipv6-address?  inet:ipv6-address
| +--rw access-interface-qos-type-mappings
|   +--rw access-interface-qos-type-mapping* [profile-map-type] {feature-list:HAVE_QOS}?
|     +--rw profile-map-type -> ../config/profile-map-type
|     +--rw config
|     | +--rw profile-map-type? ipi-vxlan-types:vxlan_qos_map_profile_type_t
|     | +--rw profile-name      string
|     +--ro state
|     +--ro profile-map-type? ipi-vxlan-types:vxlan_qos_map_profile_type_t
|     +--ro profile-name      string
+--rw double-tagged-access-interfaces
| +--rw double-tagged-access-interface* [interface-name vlan-identifier inner-vlan-identifier] {feature-
list:NOT_HAVE_DNX}?
|   +--rw interface-name          -> ../config/interface-name
|   +--rw vlan-identifier          -> ../config/vlan-identifier
|   +--rw inner-vlan-identifier    -> ../config/inner-vlan-identifier
|   +--rw config
|   | +--rw tag-protocol-identifier? string
|   | +--rw interface-name?         -> /ipi-interface:interfaces/interface/name
|   | +--rw admin-shutdown?         empty
|   | +--rw description?            cml-data-types:cml_line_t
|   | +--rw dynamic-learning-disable? empty
|   | +--rw access-mac-hold-time?    int32
|   | +--rw arp-nd-flood-suppress?   empty {feature-list:HAVE_BGP_EVPN}?
|   | +--rw garp-gna-enable?         empty {feature-list:HAVE_BGP_EVPN}?
|   | +--rw mac-address*            cml-data-types:cml_mac_addr_t

```

---

---

```

| | +--rw vlan-identifier?      string
| | +--rw inner-vlan-identifier? uint32
| +--ro state
| | +--ro tag-protocol-identifier? string
| | +--ro interface-name?      -> /ipi-interface:interfaces/interface/name
| | +--ro admin-shutdown?      empty
| | +--ro description?         cml-data-types:cml_line_t
| | +--ro dynamic-learning-disable? empty
| | +--ro access-mac-hold-time? int32
| | +--ro arp-nd-flood-suppress? empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro garp-gna-enable?     empty {feature-list:HAVE_BGP_EVPN}?
| | +--ro mac-address*         cml-data-types:cml_mac_addr_t
| | +--ro vlan-identifier?      string
| | +--ro inner-vlan-identifier? uint32
| +--rw map
| | +--rw config
| | | +--rw vxlan-identifier?  -> /vxlan/vxlan-tenants/vxlan-tenant/config/vxlan-identifier
| | | +--rw tenant-description? -> /vxlan/vxlan-tenants/vxlan-tenant/config/tenant-description
| | | +--ro state
| | |   +--ro vxlan-identifier? -> /vxlan/vxlan-tenants/vxlan-tenant/config/vxlan-identifier
| | |   +--ro tenant-description? -> /vxlan/vxlan-tenants/vxlan-tenant/config/tenant-description
| | +--rw cache
| | | +--rw config
| | | | +--rw arp-cache-disable? empty {feature-list:HAVE_BGP_EVPN}?
| | | | +--rw nd-cache-disable?  empty {feature-list:HAVE_BGP_EVPN}?
| | | +--ro state
| | |   +--ro arp-cache-disable? empty {feature-list:HAVE_BGP_EVPN}?
| | |   +--ro nd-cache-disable?  empty {feature-list:HAVE_BGP_EVPN}?
| +--rw host-macs-ipv4
| | +--rw host-mac-ipv4* [mac-address ipv4-address] {feature-list:NOT_HAVE_DNX}?
| |   +--rw mac-address  -> ../config/mac-address
| |   +--rw ipv4-address  -> ../config/ipv4-address
| |   +--rw config
| | | +--rw mac-address?  cml-data-types:cml_mac_addr_t
| | | +--rw ipv4-address? inet:ipv4-address
| | +--ro state

```

---

---

```

| |   +--ro mac-address?  cml-data-types:cml_mac_addr_t
| |   +--ro ipv4-address?  inet:ipv4-address
| +--rw host-macs-ipv6
| | +--rw host-mac-ipv6* [mac-address ipv6-address] {feature-list:HAVE_IPV6}?
| |   +--rw mac-address   -> ../config/mac-address
| |   +--rw ipv6-address  -> ../config/ipv6-address
| |   +--rw config
| | | +--rw mac-address?  cml-data-types:cml_mac_addr_t
| | | +--rw ipv6-address?  inet:ipv6-address
| |   +--ro state
| |   +--ro mac-address?  cml-data-types:cml_mac_addr_t
| |   +--ro ipv6-address?  inet:ipv6-address
| +--rw access-interface-qos-type-mappings
|   +--rw access-interface-qos-type-mapping* [profile-map-type] {feature-list:HAVE_QOS}?
|     +--rw profile-map-type  -> ../config/profile-map-type
|     +--rw config
|     | +--rw profile-map-type?  ipi-vxlan-types:vxlan_qos_map_profile_type_t
|     | +--rw profile-name      string
|     +--ro state
|     +--ro profile-map-type?  ipi-vxlan-types:vxlan_qos_map_profile_type_t
|     +--ro profile-name      string
+--ro access-interfaces
| +--ro access-interface* [interface-index]
|   +--ro interface-index  -> ../state/interface-index
|   +--ro state
|     +--ro interface-index?  uint32
|     +--ro if-name?          cml-data-types:cml_line_t
|     +--ro access-counters
|       +--ro rx-arp-discard-packets?      yang:counter64
|       +--ro tx-arp-discard-packet?       yang:counter64
|       +--ro rx-arp-request-packets?      yang:counter64
|       +--ro rx-arp-reply-packets?        yang:counter64
|       +--ro tx-arp-request-packet?       yang:counter64
|       +--ro tx-arp-reply-packet?         yang:counter64
|       +--ro rx-nd-discard-packets?       yang:counter64
|       +--ro tx-nd-discard-packet?        yang:counter64

```

---

---

```

|      +--ro rx-neighbor-solicitation-packets?  yang:counter64
|      +--ro rx-neighbor-advertisement-packets? yang:counter64
|      +--ro tx-neighbor-solicitation-packet?   yang:counter64
|      +--ro tx-neighbor-advertisement-packet?  yang:counter64
|      +--ro rx-gratuitous-arp-packets?         yang:counter64
|      +--ro tx-gratuitous-arp-packets?         yang:counter64
|      +--ro rx-gratuitous-na-packets?          yang:counter64
|      +--ro tx-gratuitous-na-packets?          yang:counter64
|      +--ro rx-data-packets?                   yang:counter64
|      +--ro rx-data-bytes?                     yang:counter64
|      +--ro tx-data-packets?                   yang:counter64
|      +--ro tx-data-bytes?                     yang:counter64
+--rw interfaces
  +--rw interface* [name]
    +--rw name      -> ../config/name
    +--rw config
      | +--rw name?      -> /ipi-interface:interfaces/interface/name
      | +--rw access-if? empty {feature-list:HAVE_XGS5,feature-list:NOT_HAVE_DUNE}?
      | +--rw evpn-mac-holdtime? uint32 {feature-list:HAVE_BGP_EVPN}?
      | +--rw arp-cache?  empty {feature-list:NOT_HAVE_DUNE}?
      | +--rw nd-cache?   empty {feature-list:NOT_HAVE_DUNE}?
      +--ro state
        +--ro name?      -> /ipi-interface:interfaces/interface/name
        +--ro access-if? empty {feature-list:HAVE_XGS5,feature-list:NOT_HAVE_DUNE}?
        +--ro evpn-mac-holdtime? uint32 {feature-list:HAVE_BGP_EVPN}?
        +--ro arp-cache?  empty {feature-list:NOT_HAVE_DUNE}?
        +--ro nd-cache?   empty {feature-list:NOT_HAVE_DUNE}?

```

rpcs:

```

+---x clear-nvo-vxlan-dynamic-mac-address-table {feature-list:HAVE_VXLAN}?
+---x clear-nvo-vxlan-dynamic-mac-address-table-vnid {feature-list:HAVE_VXLAN}?
| +---w input
|   +---w vxlan-identifier  uint32
|   +---w mac-address?     cml-data-types:cml_mac_addr_t
+---x clear-nvo-vxlan-tunnels {feature-list:HAVE_VXLAN}?
+---x clear-nvo-id-vxlan-tunnels-destip {feature-list:HAVE_VXLAN}?

```



---

```

| +---w input
|   +---w destination-vtep-ip   inet:ipv4-address
+---x clear-nvo-vxlan-mac-stale-entries {feature-list:HAVE_VXLAN}?
| +---w input
|   +---w vxlan-identifier?   uint32
+---x clear-vxlan-untagged-access-port-counters {feature-list:HAVE_VXLAN}?
| +---w input
|   +---w interface-name   string
+---x clear-vxlan-single-tagged-access-port-counters {feature-list:NOT_HAVE_DNX}?
| +---w input
|   +---w interface-name   string
|   +---w vlan-identifier   string
+---x clear-vxlan-double-tagged-access-port-counters {feature-list:NOT_HAVE_DNX}?
| +---w input
|   +---w interface-name   string
|   +---w outer-vlan-identifier   uint32
|   +---w inner-vlan-identifier   uint32
+---x clear-vxlan-access-port-counters-all {feature-list:HAVE_VXLAN}?
+---x clear-vxlan-network-port-counters {feature-list:HAVE_VXLAN}?
| +---w input
|   +---w destination-vtep-ip   inet:ipv4-address
+---x clear-vxlan-network-port-counters-all {feature-list:HAVE_VXLAN}?

```

notifications:

```

+---n vxlan-tunnel-status-change-notification
  +--ro severity?          cml-data-types:cml_notif_severity_t
  +--ro eventClass?        cml-data-types:cml_notif_class_t
  +--ro destination-vtep-ip? inet:ipv4-address
  +--ro tunnel-status?      ipi-vxlan-types:vxlan_tunnel_status_t

```

---

## module: ipi-watchdog

```

+--rw watchdog {feature-list:HAVE_PSERVD}?
  +--rw config
    | +--rw watchdog-disabled?   empty

```

```

| +--rw keepalive-interval? uint16
+--ro state
| +--ro watchdog-disabled? empty
| +--ro keepalive-interval? uint16
| +--ro watchdog-status? ipi-watchdog-types:watchdog_status_t
| +--ro all-processes-status? ipi-watchdog-types:watchdog_global_processes_status_t
+--rw software-modules
  +--rw software-module* [name]
    +--rw name -> ../config/name
    +--rw config
      | +--rw name? ipi-watchdog-types:watchdog_module_name_t
      | +--rw module-watchdog-status-disabled empty
      +--ro state
        | +--ro name? ipi-watchdog-types:watchdog_module_name_t
        | +--ro module-watchdog-status-disabled empty
      +--rw process
        +--ro state
          +--ro process-name? ipi-watchdog-types:watchdog_module_name_t
          +--ro process-status? ipi-watchdog-types:watchdog_process_status_t
          +--ro start-time? yang:date-and-time
          +--ro down-reason? cml-data-types:cml_line_t

```

#### rpcs:

```

+---x clear-core-dump {feature-list:HAVE_PSERVD,feature-list:HAVE_ZEBOS_CORE_ANALYSER}?
  +---w input
    +---w core-dump string

```

#### notifications:

```

+---n protocol-module-down {feature-list:HAVE_PSERVD}?
  | +--ro severity? cml-data-types:cml_notif_severity_t
  | +--ro eventClass? cml-data-types:cml_notif_class_t
  | +--ro name? ipi-watchdog-types:watchdog_module_name_t
  | +--ro process-name? ipi-watchdog-types:watchdog_module_name_t
  | +--ro down-reason? cml-data-types:cml_line_t
+---n protocol-module-restarted {feature-list:HAVE_PSERVD}?
  +--ro severity? cml-data-types:cml_notif_severity_t

```

```

+--ro eventClass?  cml-data-types:cml_notif_class_t
+--ro name?        ipi-watchdog-types:watchdog_module_name_t
+--ro process-name? ipi-watchdog-types:watchdog_module_name_t
+--ro start-time?   yang:date-and-time

```

---

## module: ipi-xstp

```

+--rw xstp
  +--rw interfaces
    | +--rw interface* [name]
    |   +--rw name          -> ../config/name
    |   +--rw config
    |     | +--rw name?          -> /ipi-interface:interfaces/interface/name
    |     | +--rw hello-time?     uint8
    |     | +--rw port-configuration? ipi-xstp-types:xstp_port_edge_t
    |     | +--rw enable-automatic-edge-detection? empty
    |     | +--rw bpdu-guard?      ipi-xstp-types:xstp_bpdu_t
    |     | +--rw bpdu-filter?     ipi-xstp-types:xstp_bpdu_t
    |     | +--rw enable-root-guard? empty
    |     | +--rw link-type?       ipi-xstp-types:xstp_link_type_t
    |     | +--rw enable-restricted-domain-role? empty
    |     | +--rw enable-restricted-role? empty
    |     | +--rw enable-restricted-tcn? empty
    |     +--ro state
    |       | +--ro name?          -> /ipi-interface:interfaces/interface/name
    |       | +--ro hello-time?     uint8
    |       | +--ro port-configuration? ipi-xstp-types:xstp_port_edge_t
    |       | +--ro enable-automatic-edge-detection? empty
    |       | +--ro bpdu-guard?      ipi-xstp-types:xstp_bpdu_t
    |       | +--ro bpdu-filter?     ipi-xstp-types:xstp_bpdu_t
    |       | +--ro enable-root-guard? empty
    |       | +--ro link-type?       ipi-xstp-types:xstp_link_type_t
    |       | +--ro enable-restricted-domain-role? empty
    |       | +--ro enable-restricted-role? empty
    |       | +--ro enable-restricted-tcn? empty

```

---

```

|   +--rw mstp
|   |   +--rw mst-instances
|   |   |   +--rw mst-instance* [instance-id]
|   |   |   |   +--rw instance-id   -> ../config/instance-id
|   |   |   |   +--rw config
|   |   |   |   |   +--rw instance-id?           -> /ipi-network-instance:network-instances/network-instance/ipi-
bridge:bridge/stp/mstp/mst-instances/mst-instance/instance-id
|   |   |   |   |   +--rw enable-instance-restricted-role?  empty
|   |   |   |   |   +--rw enable-instance-restricted-tcn?   empty
|   |   |   |   +--ro state
|   |   |   |   +--ro instance-id?           -> /ipi-network-instance:network-instances/network-instance/ipi-
bridge:bridge/stp/mstp/mst-instances/mst-instance/instance-id
|   |   |   |   +--ro enable-instance-restricted-role?  empty
|   |   |   |   +--ro enable-instance-restricted-tcn?   empty
|   +--rw rapid-pvst {feature-list:HAVE_RPVST_PLUS}?
|   |   +--rw vlans
|   |   |   +--rw vlan* [vlan-id]
|   |   |   |   +--rw vlan-id   -> ../config/vlan-id
|   |   |   |   +--rw config
|   |   |   |   |   +--rw enable-restricted-role?  empty
|   |   |   |   |   +--rw enable-restricted-tcn?   empty
|   |   |   |   |   +--rw vlan-id?                uint16
|   |   |   |   +--ro state
|   |   |   |   +--ro enable-restricted-role?  empty
|   |   |   |   +--ro enable-restricted-tcn?   empty
|   |   |   |   +--ro vlan-id?                uint16
|   +--rw customer-spanning-tree {feature-list:HAVE_PROVIDER_BRIDGE}?
|   |   +--rw config
|   |   |   +--rw bridge-priority?    uint16
|   |   |   +--rw max-age?            uint8
|   |   |   +--rw hello-time?        uint8
|   |   |   +--rw forward-delay?     uint8
|   |   |   +--rw transmit-hold-count? uint8
|   |   +--ro state
|   |   |   +--ro bridge-priority?    uint16
|   |   |   +--ro max-age?            uint8
|   |   |   +--ro hello-time?        uint8

```

---

```

|   | +--ro forward-delay?      uint8
|   | +--ro transmit-hold-count? uint8
|   +--rw customer-edge
|   | +--rw config
|   | | +--rw port-priority?  uint8
|   | | +--rw path-cost?     uint32
|   | +--ro state
|   |   +--ro port-priority?  uint8
|   |   +--ro path-cost?     uint32
|   +--rw provider-edge
|     +--rw vlans
|       +--rw vlan* [vlan-id]
|         +--rw svlan-id  -> ../config/svlan-id
|         +--rw config
|           | +--rw svlan-id?    uint16
|           | +--rw port-priority? uint8
|           | +--rw path-cost?   uint32
|           +--ro state
|             +--ro svlan-id?    uint16
|             +--ro port-priority? uint8
|             +--ro path-cost?   uint32
+--rw mstp
  +--rw debug
    +--rw config
      | +--rw options?  ipi-xstp-types:mstp_debug_t
    +--ro state
      +--ro options?      ipi-xstp-types:mstp_debug_t
      +--ro terminal-debug-status? ipi-xstp-types:mstp_debug_t

```

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-bridge:bridge:

```

+--rw stp
  +--rw config
    | +--rw ageing-time?          ipi-xstp-types:xstp_ageing_time_t
    | +--rw enable-cisco-interoperability? empty
    | +--rw forwarding-delay?     uint8
    | +--rw hello-time?          uint8

```

---

```

| +--rw max-age?          uint8
| +--rw max-hops?         uint8
| +--rw bridge-priority?  uint32
| +--rw transmit-hold-count?  uint8
+--ro state
| +--ro ageing-time?      ipi-xstp-types:xstp_ageing_time_t
| +--ro enable-cisco-interoperability?  empty
| +--ro forwarding-delay?  uint8
| +--ro hello-time?       uint8
| +--ro max-age?          uint8
| +--ro max-hops?         uint8
| +--ro bridge-priority?  uint32
| +--ro transmit-hold-count?  uint8
+--rw global
| +--rw config
| | +--rw enable-bpdu-filter?  empty
| | +--rw enable-bpdu-guard?   empty
| | +--rw enable-error-disable-timeout?  empty
| | +--rw force-version?       uint8
| | +--rw path-cost-method?    ipi-xstp-types:xstp_path_cost_method_t
| +--ro state
| | +--ro enable-bpdu-filter?  empty
| | +--ro enable-bpdu-guard?   empty
| | +--ro enable-error-disable-timeout?  empty
| | +--ro force-version?       uint8
| | +--ro path-cost-method?    ipi-xstp-types:xstp_path_cost_method_t
| +--rw bridge-admins
| | +--rw bridge-admin* [bridge-type disable-spanning-tree]
| |   +--rw bridge-type      -> ../config/bridge-type
| |   +--rw disable-spanning-tree  -> ../config/disable-spanning-tree
| |   +--rw config
| |     | +--rw bridge-forwarding?  ipi-xstp-types:xstp_bridge_forward_t
| |     | +--rw bridge-type?       ipi-xstp-types:xstp_bridge_type_t
| |     | +--rw disable-spanning-tree?  empty
| |     +--ro state
| |       +--ro bridge-forwarding?  ipi-xstp-types:xstp_bridge_forward_t

```

---

```
| |   +--ro bridge-type?      ipi-xstp-types:xstp_bridge_type_t
| |   +--ro disable-spanning-tree?  empty
| +--rw bridge-shutdowns
|   +--rw bridge-shutdown* [enable-shutdown]
|     +--rw enable-shutdown  -> ../config/enable-shutdown
|     +--rw config
|       | +--rw bridge-forwarding? ipi-xstp-types:xstp_bridge_forward_t
|       | +--rw enable-shutdown?  empty
|       +--ro state
|         +--ro bridge-forwarding? ipi-xstp-types:xstp_bridge_forward_t
|         +--ro enable-shutdown?  empty
+--rw mstp
| +--rw config
| | +--rw region-name?      string
| | +--rw revision-number?  uint16
| +--ro state
| | +--ro counters
| | | +--ro topology-changes-count?  uint32
| | | +--ro total-topology-changes-count?  uint32
| | | +--ro max-age-count?            uint32
| | +--ro region-name?              string
| | +--ro revision-number?          uint16
| | +--ro topology-change-detected?  boolean
| | +--ro last-topology-change?      yang:date-and-time
| | +--ro topology-change-initiator?  uint16
| | +--ro topology-change-last-received-from?  string
| | +--ro cist-bridge-id?            string
| | +--ro cist-designated-root?      string
| | +--ro cist-regional-root?        string
| | +--ro cist-designated-bridge?    string
| | +--ro cist-port-root-id?         uint16
| | +--ro external-root-path-cost?   uint32
| | +--ro internal-root-path-cost?   uint32
| +--rw mst-instances
|   +--rw mst-instance* [instance-id]
|     | +--rw instance-id  -> ../config/instance-id
```

---

```

| | +--rw config
| | | +--rw instance-id?      ipi-xstp-types:mstp_instance_t
| | | +--rw bridge-priority?  uint32
| | | +--rw vlan-id?          cml-data-types:cml_range_t
| | +--ro state
| | | +--ro instance-id?      ipi-xstp-types:mstp_instance_t
| | | +--ro bridge-priority?  uint32
| | | +--ro vlan-id?          cml-data-types:cml_range_t
| | | +--ro bridge-id?        string
| | | +--ro designated-root-priority?  uint16
| | | +--ro designated-root-address?  yang:mac-address
| | | +--ro internal-root-path-cost?  uint32
| | | +--ro root-port-ifindex?  uint32
| | | +--ro topology-change-detected?  boolean
| | | +--ro topology-change-initiator?  uint16
| | | +--ro topology-change-last-received-from?  string
| | | +--ro last-topology-change?      yang:date-and-time
| | | +--ro topology-changes?          uint32
| | +--rw interfaces
| |   +--rw interface* [name]
| |     +--rw name      -> ../config/name
| |     +--rw config
| |       | +--rw name?      -> /ipi-interface:interfaces/interface/name
| |       | +--rw path-cost?  uint32
| |       | +--rw port-priority?  int16
| |       +--ro state
| |         +--ro counters
| |           | +--ro config-bpdu-sent?  uint32
| |           | +--ro config-bpdu-received?  uint32
| |           | +--ro tcn-bpdu-sent?      uint32
| |           | +--ro tcn-bpdu-received?  uint32
| |           | +--ro similar-bpdu-count?  uint32
| |           +--ro name?                  -> /ipi-interface:interfaces/interface/name
| |           +--ro path-cost?              uint32
| |           +--ro port-priority?          int16
| |           +--ro port-id?                uint16

```

---



```

| |      +--ro internal-root-path-cost?   uint32
| |      +--ro designated-root-priority?  uint16
| |      +--ro designated-root-address?   yang:mac-address
| |      +--ro designated-bridge-priority? uint16
| |      +--ro designated-bridge-address? yang:mac-address
| |      +--ro designated-port-priority?  uint16
| |      +--ro designated-port-num?       uint16
| |      +--ro designated-cost?           uint16
| |      +--ro hello-time-remaining?      uint32
| |      +--ro forward-time-remaining?    uint32
| |      +--ro message-age-time-remaining? uint32
| |      +--ro port-state?                ipi-xstp-types:mstp_port_state_t
| |      +--ro port-role?                ipi-xstp-types:mstp_port_role_t
| +--rw te-mst-instance
|   +--rw config
|     | +--rw vlan-id*          uint16
|     | +--rw disable-spanning-tree? empty
|     +--ro state
|       | +--ro vlan-id*          uint16
|       | +--ro disable-spanning-tree? empty
|       | +--ro bridge-id?        string
|       | +--ro designated-root-priority? uint16
|       | +--ro designated-root-address? yang:mac-address
|       | +--ro internal-root-path-cost? uint32
|       | +--ro root-port-ifindex?   uint32
|       | +--ro topology-change-detected? boolean
|       | +--ro topology-change-initiator? uint16
|       | +--ro topology-change-last-received-from? string
|       | +--ro last-topology-change? yang:date-and-time
|       | +--ro topology-changes?    uint32
|   +--rw interfaces
|     +--rw interface* [name]
|       +--rw name    -> ../config/name
|       +--rw config
|         | +--rw name? -> /ipi-interface:interfaces/interface/name
|         +--ro state

```

```

|      +--ro counters
|      | +--ro config-bpdu-sent?   uint32
|      | +--ro config-bpdu-received? uint32
|      | +--ro tcn-bpdu-sent?      uint32
|      | +--ro tcn-bpdu-received?  uint32
|      | +--ro similar-bpdu-count? uint32
|      +--ro name?                  -> /ipi-interface:interfaces/interface/name
|      +--ro port-id?               uint16
|      +--ro internal-root-path-cost? uint32
|      +--ro designated-root-priority? uint16
|      +--ro designated-root-address? yang:mac-address
|      +--ro designated-bridge-priority? uint16
|      +--ro designated-bridge-address? yang:mac-address
|      +--ro designated-port-priority? uint16
|      +--ro designated-port-num?     uint16
|      +--ro designated-cost?         uint16
|      +--ro hello-time-remaining?    uint32
|      +--ro forward-time-remaining?  uint32
|      +--ro message-age-time-remaining? uint32
|      +--ro port-state?              ipi-xstp-types:mstp_port_state_t
|      +--ro port-role?              ipi-xstp-types:mstp_port_role_t
+--rw rapid-pvst {feature-list:HAVE_RPVST_PLUS}?
  +--rw vlans
    +--rw vlan* [vlan-id]
      +--rw vlan-id  -> ../config/vlan-id
      +--rw config
        | +--rw bridge-priority? uint32
        | +--rw vlan-id?        uint16
        +--ro state
          +--ro bridge-priority? uint32
          +--ro vlan-id?        uint16
  augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-bridge:bridge/ipi-bridge:bridge-ports/ipi-bridge:interface:
    +--rw mstp-port
      +--rw port-bridge
        +--rw config
          | +--rw path-cost?    uint32

```

---

```

| +--rw port-priority?  int16
+--ro state
  +--ro counters
    | +--ro config-bpdu-sent?      uint32
    | +--ro config-bpdu-received?  uint32
    | +--ro tcn-bpdu-sent?        uint32
    | +--ro tcn-bpdu-received?    uint32
    | +--ro source-mac-count?     uint32
    | +--ro similar-bpdu-count?   uint32
    | +--ro total-src-mac-count?  uint32
    +--ro path-cost?              uint32
    +--ro port-priority?          int16
    +--ro link-type?              ipi-xstp-types:xstp_link_type_t
    +--ro bpdu-filter?            ipi-xstp-types:xstp_bpdu_t
    +--ro bpdu-guard?             ipi-xstp-types:xstp_bpdu_t
    +--ro root-guard?             empty
    +--ro cist-path-cost?          uint32
    +--ro cist-priority?           uint32
    +--ro cist-port-id?           uint16
    +--ro cist-port-number?        uint16
    +--ro cist-root?              string
    +--ro cist-regional-root?      string
    +--ro cist-designated-bridge?  string
    +--ro cist-designated-root-path-cost?  uint32
    +--ro cist-designated-external-root-path-cost?  uint32
    +--ro cist-designated-internal-root-path-cost?  uint32
    +--ro cist-designated-port-id?  uint32
    +--ro cist-hello-time-remaining?  uint32
    +--ro cist-forward-time-remaining?  uint32
    +--ro cist-message-age-time-remaining?  uint32
    +--ro cist-topology-change-time-remaining?  uint32
    +--ro cist-port-state?         string
    +--ro cist-port-role?          ipi-xstp-types:mstp_port_role_t
    +--ro cist-forward-transitions?  uint32
    +--ro service-vlan-id?          uint16 {feature-list:HAVE_PROVIDER_BRIDGE}?

```

```

augment /ipi-network-instance:network-instances/ipi-network-instance:network-instance/ipi-bridge:bridge/ipi-bridge:bridge-ports/ipi-bridge:interface:

```

---

```
+--rw vlan-port {feature-list:HAVE_RPVST_PLUS}?
```

```
+--rw vlans
```

```
+--rw vlan* [vlan-id]
```

```
+--rw vlan-id -> ../config/vlan-id
```

```
+--rw config
```

```
| +--rw vlan-id?      uint16
```

```
| +--rw port-priority? uint8
```

```
| +--rw path-cost?    uint32
```

```
+--ro state
```

```
+--ro vlan-id?      uint16
```

```
+--ro port-priority? uint8
```

```
+--ro path-cost?    uint32
```

```
rpcs:
```

```
+---x mstp-terminal-debug-on {feature-list:HAVE_MSTPD}?
```

```
| +---w input
```

```
| +---w terminal-debug-options ipi-xstp-types:mstp_debug_t
```

```
+---x mstp-terminal-debug-off {feature-list:HAVE_MSTPD}?
```

```
| +---w input
```

```
| +---w terminal-debug-options ipi-xstp-types:mstp_debug_t
```

```
+---x clear-spanning-tree-detected-protocols-per-bridge {feature-list:HAVE_MSTPD}?
```

```
| +---w input
```

```
| +---w bridge-id  string
```

```
+---x clear-spanning-tree-detected-protocols-per-interface {feature-list:HAVE_MSTPD}?
```

```
| +---w input
```

```
| +---w interface-name  string
```

```
+---x clear-spanning-tree-statistics-per-instance-and-bridge {feature-list:HAVE_MSTPD,feature-  
list:HAVE_PROVIDER_BRIDGE_OR_HAVE_B_BEB}?
```

```
| +---w input
```

```
| +---w bridge-id      string
```

```
| +---w mst-instance-id ipi-xstp-types:mstp_instance_spbm_type_t
```

```
+---x clear-spanning-tree-statistics-per-interface-vlan-and-bridge {feature-list:HAVE_MSTPD,feature-  
list:HAVE_PROVIDER_BRIDGE_OR_HAVE_B_BEB}?
```

```
| +---w input
```

```
| +---w bridge-id      string
```

```
| +---w interface-name  string
```

```
| +---w vlan-id        uint16
```

```
+---x clear-spanning-tree-statistics-per-interface-and-bridge {feature-list:HAVE_MSTPD}?
| +---w input
|   +---w bridge-id      string
|   +---w interface-name string
+---x clear-spanning-tree-statistics-per-bridge {feature-list:HAVE_MSTPD}?
| +---w input
|   +---w bridge-id      string
+---x clear-spanning-tree-statistics-per-vlan-and-bridge {feature-list:HAVE_MSTPD}?
| +---w input
|   +---w bridge-id      string
|   +---w vlan-id        uint16
+---x clear-spanning-tree-statistics-per-interface-instance-and-bridge {feature-list:HAVE_MSTPD}?
| +---w input
|   +---w bridge-id      string
|   +---w interface-name string
|   +---w mst-instance-id ipi-xstp-types:mstp_instance_spbm_type_t
+---x mstp-snmp-restart {feature-list:HAVE_SNMP}?
```

## notifications:

```
+---n bridge-new-root-notification
  +--ro severity?  cml-data-types:cml_notif_severity_t
  +--ro eventClass? cml-data-types:cml_notif_class_t
  +--ro message?   string
```

