



# 9920 v21.2.2.0 YANG Reference Guide

Module Structures, Network Configuration, and  
Management

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## Abstract

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The 9920 YANG Developer Reference Guide for version 21.2.2.0 provides detailed technical specifications and guidelines for implementing and supporting YANG modules in the Extreme 9920 software with the NPB application. It covers both standard OpenConfig YANG attributes and Extreme-specific YANG tree structures. Key sections include support for critical modules such as ACL, interfaces, LLDP, network instances, platform, QoS, and system. Each module is accompanied by a comprehensive YANG tree, illustrating its structure, supported commands, and attributes. Additionally, the guide outlines augmentations specific to Extreme Networks' features, ensuring seamless integration of YANG models for network configuration, monitoring, and management. Advanced features such as FEC modes, transceiver management, breakout capabilities, and VLAN configurations are also explored, making it essential for network administrators and engineers managing Extreme 9920 systems.



# Preface

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Read the following topics to learn about:

- The meanings of text formats used in this document.
- Where you can find additional information and help.
- How to reach us with questions and comments.






## Text Conventions

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Unless otherwise noted, information in this document applies to all supported environments for the products in question. Exceptions, like command keywords associated with a specific software version, are identified in the text.

When a feature, function, or operation pertains to a specific hardware product, the product name is used. When features, functions, and operations are the same across an entire product family, such as Extreme Networks switches or SLX routers, the product is referred to as *the switch* or *the router*.

**Table 1: Notes and warnings**

Icon	Notice type	Alerts you to...
	Tip	Helpful tips and notices for using the product
	Note	Useful information or instructions
	Important	Important features or instructions
	Caution	Risk of personal injury, system damage, or loss of data
	Warning	Risk of severe personal injury

**Table 2: Text**

Convention	Description
screen displays	This typeface indicates command syntax, or represents information as it is displayed on the screen.
The words <i>enter</i> and <i>type</i>	When you see the word <i>enter</i> in this guide, you must type something, and then press the Return or Enter key. Do not press the Return or Enter key when an instruction simply says <i>type</i> .
<b>Key names</b>	Key names are written in boldface, for example <b>Ctrl</b> or <b>Esc</b> . If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press <b>Ctrl+Alt+Del</b>
<i>Words in italicized type</i>	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles.
<b>NEW!</b>	New information. In a PDF, this is searchable text.

**Table 3: Command syntax**

Convention	Description
<b>bold text</b>	Bold text indicates command names, keywords, and command options.
<i>italic text</i>	Italic text indicates variable content.
[ ]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{ <b>x</b>   <b>y</b>   <b>z</b> }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
<b>x</b>   <b>y</b>	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <i>member [member...]</i> .
\	In command examples, the backslash indicates a “soft” line break. When a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

## Documentation and Training

Find Extreme Networks product information at the following locations:

[Current Product Documentation](#)

[Release Notes](#)

[Hardware and Software Compatibility](#) for Extreme Networks products

[Extreme Optics Compatibility](#)

[Other Resources](#) such as articles, white papers, and case studies

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## Help and Support

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If you require assistance, contact Extreme Networks using one of the following methods:

### Extreme Portal

Search the GTAC (Global Technical Assistance Center) knowledge base; manage support cases and service contracts; download software; and obtain product licensing, training, and certifications.

### The Hub

A forum for Extreme Networks customers to connect with one another, answer questions, and share ideas and feedback. This community is monitored by Extreme Networks employees, but is not intended to replace specific guidance from GTAC.

### Call GTAC

For immediate support: (800) 998 2408 (toll-free in U.S. and Canada) or 1 (408) 579 2800. For the support phone number in your country, visit [www.extremenetworks.com/support/contact](http://www.extremenetworks.com/support/contact).

Before contacting Extreme Networks for technical support, have the following information ready:

- Your Extreme Networks service contract number, or serial numbers for all involved Extreme Networks products
- A description of the failure
- A description of any actions already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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You can subscribe to email notifications for product and software release announcements, Field Notices, and Vulnerability Notices.

1. Go to [The Hub](#).
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3. Select a product for which you would like to receive notifications.
4. Select **Subscribe**.
5. To select additional products, return to the **Product Announcements** list and repeat steps 3 and 4.

You can modify your product selections or unsubscribe at any time.

## Send Feedback

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The User Enablement team at Extreme Networks has made every effort to ensure that this document is accurate, complete, and easy to use. We strive to improve our documentation to help you in your work, so we want to hear from you. We welcome all feedback, but we especially want to know about:

- Content errors, or confusing or conflicting information.
- Improvements that would help you find relevant information.
- Broken links or usability issues.

To send feedback, email us at [documentation@extremenetworks.com](mailto:documentation@extremenetworks.com).

Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.





# What's New in this Document

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The following table describes changes to this guide for the Extreme 9920 software, release 21.2.2.0.

**Table 4: Summary of changes**

Description	Topic
Updated topic	<a href="#">Standard OpenConfig YANG Tree</a> on page 10
Updated topic	<a href="#">Extreme YANG Tree</a> on page 46

For more information about this release, see the [Extreme 9920 Software Release Notes, 21.2.2.0](#).



# Standard OpenConfig YANG

- [Standard OpenConfig YANG Tree](#) on page 10
- [bfd Module Support](#) on page 30
- [Defined Sets Module Support](#) on page 31
- [Interfaces Module Support](#) on page 32
- [LLDP Module Support](#) on page 34
- [Network Instance Module Support](#) on page 35
- [Optical Transport Module Support](#) on page 37
- [Platform Module Support](#) on page 38
- [Routing Policy Module Support](#) on page 40
- [System Module Support](#) on page 41

This section describes the Standard OpenConfig YANG attributes that are supported by the Extreme 9920 software with the NPB application.

## Standard OpenConfig YANG Tree

```
module: openconfig-network-instance
  +--rw network-instances
    +--rw network-instance* [name]
      +--rw name -> ../config/name
      +--rw config
        | +--rw name? string
        | +--rw type? identityref
        | +--rw enabled? boolean
        | +--rw description? string
        | +--rw router-id? yang:dotted-quad
        | +--rw route-distinguisher? oc-ni-types:route-distinguisher
        | +--rw enabled-address-families* identityref
        | +--rw mtu? uint16
      +--ro state
        | +--ro name? string
        | +--ro type? identityref
        | +--ro enabled? boolean
        | +--ro description? string
        | +--ro router-id? yang:dotted-quad
        | +--ro route-distinguisher? oc-ni-types:route-distinguisher
        | +--ro enabled-address-families* identityref
        | +--ro mtu? uint16
      +--rw interfaces
        | +--rw interface* [id]
        | | +--rw id -> ../config/id
        | | +--rw config
        | | | +--rw id? string
        | | | +--rw interface? -> /oc-if:interfaces/interface/name
        | | | +--rw subinterface? -> /oc-if:interfaces/interface[oc-
```

```

if:name=current()/../interface]/subinterfaces/subinterface/index
| | +--rw associated-address-families* identityref
| | +--rw mac-pinning? boolean
| | +--rw irb-anycast-gateway? enumeration
| +--ro state
| +--ro id? string
| +--ro interface? -> /oc-if:interfaces/interface/name
| +--ro subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
| +--ro associated-address-families* identityref
| +--ro mac-pinning? boolean
| +--ro irb-anycast-gateway? enumeration
+--rw protocols
+--rw protocol* [identifier name]
+--rw identifier -> ../config/identifier
+--rw name -> ../config/name
+--rw config
| +--rw identifier? identityref
| +--rw name? string
| +--rw enabled? boolean
| +--rw default-metric? uint32
+--ro state
| +--ro identifier? identityref
| +--ro name? string
| +--ro enabled? boolean
| +--ro default-metric? uint32
+--rw static-routes
+--rw static* [prefix]
+--rw prefix -> ../config/prefix
+--rw config
| +--rw prefix? inet:ip-prefix
| +--rw set-tag? oc-pt:tag-type
| +--rw description? string
+--ro state
| +--ro prefix? inet:ip-prefix
| +--ro set-tag? oc-pt:tag-type
| +--ro description? string
+--rw next-hops
+--rw next-hop* [index]
+--rw index -> ../config/index
+--rw config
| +--rw index? string
| +--rw next-hop? union
| +--rw metric? uint32
| +--rw recurse? boolean
+--ro state
| +--ro index? string
| +--ro next-hop? union
| +--ro metric? uint32
| +--ro recurse? boolean
+--rw enable-bfd
| +--rw config
| | +--rw enabled? boolean
| +--ro state
| +--ro enabled? boolean
+--rw interface-ref
+--rw config
| +--rw interface? -> /oc-if:interfaces/interface/name
| +--rw subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
+--ro state
+--ro interface? -> /oc-if:interfaces/interface/name
+--ro subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index

```

```

module: openconfig-if-ip

augment /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface:
  +--rw ipv4
    +--rw addresses
      | +--rw address* [ip]
      |   +--rw ip -> ../config/ip
      |   +--rw config
      |     | +--rw ip? oc-inet:ipv4-address
      |     | +--rw prefix-length? uint8
      |     +--ro state
      |       | +--ro ip? oc-inet:ipv4-address
      |       | +--ro prefix-length? uint8
      |       | +--ro origin? ip-address-origin
      |     +--rw vrrp
      |       +--rw vrrp-group* [virtual-router-id]
      |         +--rw virtual-router-id -> ../config/virtual-router-id
      |         +--rw config
      |           | +--rw virtual-router-id? uint8
      |           | +--rw virtual-address* oc-inet:ip-address
      |           | +--rw priority? uint8
      |           | +--rw preempt? boolean
      |           | +--rw preempt-delay? uint16
      |           | +--rw accept-mode? boolean
      |           | +--rw advertisement-interval? uint16
      |           +--ro state
      |             | +--ro virtual-router-id? uint8
      |             | +--ro virtual-address* oc-inet:ip-address
      |             | +--ro priority? uint8
      |             | +--ro preempt? boolean
      |             | +--ro preempt-delay? uint16
      |             | +--ro accept-mode? boolean
      |             | +--ro advertisement-interval? uint16
      |             | +--ro current-priority? uint8
      |           +--rw interface-tracking
      |             +--rw config
      |               | +--rw track-interface* -> /oc-if:interfaces/interface/name
      |               | +--rw priority-decrement? uint8
      |             +--ro state
      |               +--ro track-interface* -> /oc-if:interfaces/interface/name
      |               +--ro priority-decrement? uint8
      +--rw proxy-arp
      | +--rw config
      | | +--rw mode? enumeration
      | +--ro state
      | +--ro mode? enumeration
      +--rw neighbors
      | +--rw neighbor* [ip]
      |   +--rw ip -> ../config/ip
      |   +--rw config
      |     | +--rw ip? oc-inet:ipv4-address
      |     | +--rw link-layer-address oc-yang:phys-address
      |     +--ro state
      |       | +--ro ip? oc-inet:ipv4-address
      |       | +--ro link-layer-address oc-yang:phys-address
      |       +--ro origin? neighbor-origin
      +--rw unnumbered
      | +--rw config
      | | +--rw enabled? boolean
      | +--ro state
      | | +--ro enabled? boolean
      | +--rw interface-ref
      | +--rw config

```

```

    | | +--rw interface?      -> /oc-if:interfaces/interface/name
    | | +--rw subinterface?   -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
    |   +--ro state
    |     +--rw interface?    -> /oc-if:interfaces/interface/name
    |     +--rw subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
  +--rw config
    | +--rw enabled?         boolean
    | +--rw mtu?             uint16
    | +--rw dhcp-client?    boolean
  +--ro state
    +--ro enabled?         boolean
    +--ro mtu?             uint16
    +--ro dhcp-client?    boolean
  +--ro counters
    +--ro in-pkts?         oc-yang:counter64
    +--ro in-octets?      oc-yang:counter64
    +--ro in-error-pkts?  oc-yang:counter64
    +--ro in-forwarded-pkts? oc-yang:counter64
    +--ro in-forwarded-octets? oc-yang:counter64
    +--ro in-discarded-pkts? oc-yang:counter64
    +--ro out-pkts?       oc-yang:counter64
    +--ro out-octets?     oc-yang:counter64
    +--ro out-error-pkts? oc-yang:counter64
    +--ro out-forwarded-pkts? oc-yang:counter64
    +--ro out-forwarded-octets? oc-yang:counter64
    +--ro out-discarded-pkts? oc-yang:counter64
augment /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface:
  +--rw ipv6
    +--rw addresses
      | +--rw address* [ip]
      |   +--rw ip      -> ../config/ip
      |   +--rw config
      |     | +--rw ip?          oc-inet:ipv6-address
      |     | +--rw prefix-length  uint8
      |     +--ro state
      |     | +--ro ip?          oc-inet:ipv6-address
      |     | +--ro prefix-length  uint8
      |     | +--ro origin?       ip-address-origin
      |     | +--ro status?       enumeration
      +--rw vrrp
        +--rw vrrp-group* [virtual-router-id]
          +--rw virtual-router-id  -> ../config/virtual-router-id
          +--rw config
            | +--rw virtual-router-id?    uint8
            | +--rw virtual-address*     oc-inet:ip-address
            | +--rw priority?            uint8
            | +--rw preempt?             boolean
            | +--rw preempt-delay?       uint16
            | +--rw accept-mode?         boolean
            | +--rw advertisement-interval? uint16
            | +--rw virtual-link-local?  oc-inet:ip-address
          +--ro state
            | +--ro virtual-router-id?    uint8
            | +--ro virtual-address*     oc-inet:ip-address
            | +--ro priority?            uint8
            | +--ro preempt?             boolean
            | +--ro preempt-delay?       uint16
            | +--ro accept-mode?         boolean
            | +--ro advertisement-interval? uint16
            | +--ro current-priority?    uint8
            | +--ro virtual-link-local?  oc-inet:ip-address
          +--rw interface-tracking

```

```

|           +--rw config
|           | +--rw track-interface*   -> /oc-if:interfaces/interface/name
|           | +--rw priority-decrement? uint8
|           +--ro state
|             +--ro track-interface*   -> /oc-if:interfaces/interface/name
|             +--ro priority-decrement? uint8
+--rw router-advertisement
| +--rw config
| | +--rw interval?   uint32
| | +--rw lifetime?  uint32
| | +--rw suppress?  boolean
| +--ro state
|   +--ro interval?   uint32
|   +--ro lifetime?  uint32
|   +--ro suppress?  boolean
+--rw neighbors
| +--rw neighbor* [ip]
|   +--rw ip      -> ../config/ip
|   +--rw config
|   | +--rw ip?          oc-inet:ipv6-address
|   | +--rw link-layer-address oc-yang:phys-address
|   +--ro state
|     +--ro ip?          oc-inet:ipv6-address
|     +--ro link-layer-address oc-yang:phys-address
|     +--ro origin?     neighbor-origin
|     +--ro is-router?  boolean
|     +--ro neighbor-state? enumeration
+--rw unnumbered
| +--rw config
| | +--rw enabled?  boolean
| +--ro state
| | +--ro enabled?  boolean
| +--rw interface-ref
|   +--rw config
|   | +--rw interface?   -> /oc-if:interfaces/interface/name
|   | +--rw subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
|   +--ro state
|   | +--ro interface?   -> /oc-if:interfaces/interface/name
|   | +--ro subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
+--rw config
| +--rw enabled?          boolean
| +--rw mtu?              uint32
| +--rw dup-addr-detect-transmits? uint32
| +--rw dhcp-client?     boolean
+--ro state
| +--ro enabled?          boolean
| +--ro mtu?              uint32
| +--ro dup-addr-detect-transmits? uint32
| +--ro dhcp-client?     boolean
+--ro counters
|   +--ro in-pkts?        oc-yang:counter64
|   +--ro in-octets?     oc-yang:counter64
|   +--ro in-error-pkts? oc-yang:counter64
|   +--ro in-forwarded-pkts? oc-yang:counter64
|   +--ro in-forwarded-octets? oc-yang:counter64
|   +--ro in-discarded-pkts? oc-yang:counter64
|   +--ro out-pkts?      oc-yang:counter64
|   +--ro out-octets?    oc-yang:counter64
|   +--ro out-error-pkts? oc-yang:counter64
|   +--ro out-forwarded-pkts? oc-yang:counter64
|   +--ro out-forwarded-octets? oc-yang:counter64
|   +--ro out-discarded-pkts? oc-yang:counter64

```

```

+--rw oc-ip-ext:autoconf
  +--rw oc-ip-ext:config
    | +--rw oc-ip-ext:create-global-addresses?      boolean
    | +--rw oc-ip-ext:create-temporary-addresses?   boolean
    | +--rw oc-ip-ext:temporary-valid-lifetime?    uint32
    | +--rw oc-ip-ext:temporary-preferred-lifetime? uint32
  +--ro oc-ip-ext:state
    +--ro oc-ip-ext:create-global-addresses?      boolean
    +--ro oc-ip-ext:create-temporary-addresses?   boolean
    +--ro oc-ip-ext:temporary-valid-lifetime?    uint32
    +--ro oc-ip-ext:temporary-preferred-lifetime? uint32

module: openconfig-lldp
+--rw lldp
  +--rw config
    | +--rw enabled?                               boolean
    | +--rw hello-timer?                           uint64
    | +--rw suppress-tlv-advertisement*            identityref
    | +--rw system-name?                            string
    | +--rw system-description?                     string
    | +--rw chassis-id?                             string
    | +--rw chassis-id-type?                       oc-lldp-types:chassis-id-type
    | +--rw extr-lldp-ext:holdtime?                 uint16
    | +--rw extr-lldp-ext:transmit?                 boolean
    | +--rw extr-lldp-ext:receive?                 boolean
  +--ro state
    | +--ro enabled?                               boolean
    | +--ro hello-timer?                           uint64
    | +--ro suppress-tlv-advertisement*            identityref
    | +--ro system-name?                            string
    | +--ro system-description?                     string
    | +--ro chassis-id?                             string
    | +--ro chassis-id-type?                       oc-lldp-types:chassis-id-type
    | +--ro counters
    | | +--ro frame-in?          yang:counter64
    | | +--ro frame-out?         yang:counter64
    | | +--ro last-clear?        yang:date-and-time
    | +--ro extr-lldp-ext:holdtime?                 uint16
    | +--ro extr-lldp-ext:transmit?                 boolean
    | +--ro extr-lldp-ext:receive?                 boolean
  +--rw interfaces
    +--rw interface* [name]
      +--rw name          -> ../config/name
      +--rw config
        | +--rw name?          oc-if:base-interface-ref
        | +--rw enabled?       boolean
        | +--rw extr-lldp-ext:transmit? boolean
        | +--rw extr-lldp-ext:receive? boolean
      +--ro state
        | +--ro name?          oc-if:base-interface-ref
        | +--ro enabled?       boolean
        | +--ro counters
        | | +--ro frame-in?    yang:counter64
        | | +--ro frame-out?   yang:counter64
        | | +--ro last-clear?  yang:date-and-time
        | +--ro extr-lldp-ext:transmit? boolean
        | +--ro extr-lldp-ext:receive? boolean
      +--ro neighbors
        +--ro neighbor* [id]
          +--ro id          -> ../state/id
          +--ro config
          +--ro state
            | +--ro system-name?      string
            | +--ro system-description? string

```

```

| +--ro chassis-id?          string
| +--ro chassis-id-type?    oc-lldp-types:chassis-id-type
| +--ro id?                  string
| +--ro age?                  uint64
| +--ro last-update?         int64
| +--ro ttl?                  uint16
| +--ro port-id?             string
| +--ro port-id-type?        oc-lldp-types:port-id-type
| +--ro port-description?    string
| +--ro management-address?  string
| +--ro management-address-type? string
+--ro capabilities
  +--ro capability* [name]
    +--ro name      -> ../state/name
    +--ro config
    +--ro state
      +--ro name?      identityref
      +--ro enabled?   boolean

module: openconfig-lacp
+--rw lacp
  +--rw config
  | +--rw system-priority?    uint16
  | +--rw extr-lacp-ext:enabled? boolean
  +--ro state
  | +--ro system-priority?    uint16
  | +--ro extr-lacp-ext:enabled? boolean
  +--rw interfaces
    +--rw interface* [name]
      +--rw name      -> ../config/name
      +--rw config
      | +--rw name?          oc-if:base-interface-ref
      | +--rw interval?      lacp-period-type
      | +--rw lacp-mode?      lacp-activity-type
      | +--rw system-id-mac?  oc-yang:mac-address
      | +--rw system-priority? uint16
      +--ro state
      | +--ro name?          oc-if:base-interface-ref
      | +--ro interval?      lacp-period-type
      | +--ro lacp-mode?      lacp-activity-type
      | +--ro system-id-mac?  oc-yang:mac-address
      | +--ro system-priority? uint16
      +--ro members
        +--ro member* [interface]
          +--ro interface -> ../state/interface
          +--ro state
            +--ro interface?          oc-if:base-
interface-ref
            +--ro activity?           lacp-activity-
type
            +--ro timeout?            lacp-timeout-type
            +--ro synchronization?    lacp-
synchronization-type
            +--ro aggregatable?       boolean
            +--ro collecting?          boolean
            +--ro distributing?       boolean
            +--ro system-id?          oc-yang:mac-
address
            +--ro oper-key?           uint16
            +--ro partner-id?         oc-yang:mac-
address
            +--ro partner-key?        uint16
            +--ro port-num?           uint16
            +--ro partner-port-num?   uint16

```



```

        +--ro counters
        | +--ro lacp-in-pkts?          oc-yang:counter64
        | +--ro lacp-out-pkts?       oc-yang:counter64
        | +--ro lacp-rx-errors?     oc-yang:counter64
        | +--ro lacp-tx-errors?     oc-yang:counter64
        | +--ro lacp-unknown-errors? oc-yang:counter64
        | +--ro lacp-errors?        oc-yang:counter64
        +--ro extr-lacp-ext:rx-machine? rx-machine-state
        +--ro extr-lacp-ext:rx-time?   uint32
        +--ro extr-lacp-ext:tx-machine? tx-machine-state
        +--ro extr-lacp-ext:mux-machine? mux-machine-state
        +--ro extr-lacp-ext:mux-reason? string
        +--ro extr-lacp-ext:actor-churn-machine? churn-machine-
state
state
        +--ro extr-lacp-ext:partner-churn-machine? churn-machine-
state
state
        +--ro extr-lacp-ext:actor-churn-count? oc-yang:counter64
        +--ro extr-lacp-ext:partner-churn-count? oc-yang:counter64
        +--ro extr-lacp-ext:actor-sync-transition-count? oc-yang:counter64
        +--ro extr-lacp-ext:partner-sync-transition-count? oc-yang:counter64
        +--ro extr-lacp-ext:actor-change-count? oc-yang:counter64
        +--ro extr-lacp-ext:partner-change-count? oc-yang:counter64
        +--ro extr-lacp-ext:actor-cds-churn-machine? churn-machine-
state
state
state
        +--ro extr-lacp-ext:partner-cds-churn-machine? churn-machine-
state
state
        +--ro extr-lacp-ext:actor-cds-churn-count? oc-yang:counter64
        +--ro extr-lacp-ext:partner-cds-churn-count? oc-yang:counter64

module: openconfig-platform
  +--rw components
    +--rw component* [name]
      +--rw name                               -> ../config/name
      +--rw config
      | +--rw name?   string
      +--ro state
      | +--ro name?           string
      | +--ro type?          union
      | +--ro id?            string
      | +--ro location?     string
      | +--ro description?  string
      | +--ro mfg-name?     string
      | +--ro mfg-date?    oc-yang:date
      | +--ro hardware-version? string
      | +--ro firmware-version? string
      | +--ro software-version? string
      | +--ro serial-no?    string
      | +--ro part-no?     string
      | +--ro removable?   boolean
      | +--ro oper-status? identityref
      | +--ro empty?      boolean
      | +--ro parent?    -> ../../../../component/config/name
      | +--ro temperature
      | | +--ro instant?   decimal64
      | | +--ro avg?      decimal64
      | | +--ro min?      decimal64
      | | +--ro max?      decimal64
      | | +--ro interval? oc-types:stat-interval
      | | +--ro min-time? oc-types:timeticks64
      | | +--ro max-time? oc-types:timeticks64
      | | +--ro alarm-status? boolean
      | | +--ro alarm-threshold? uint32
      | | +--ro alarm-severity? identityref
      | +--ro memory

```

```

| | +--ro available?   uint64
| | +--ro utilized?   uint64
| +--ro allocated-power?   uint32
| +--ro used-power?       uint32
| +--ro oc-alarms:equipment-failure?   boolean
| +--ro oc-alarms:equipment-mismatch?  boolean
+--rw properties
| +--rw property* [name]
|   +--rw name      -> ../config/name
|   +--rw config
|     | +--rw name?   string
|     | +--rw value?  union
|     +--ro state
|       +--ro name?      string
|       +--ro value?     union
|       +--ro configurable?  boolean
+--rw subcomponents
| +--rw subcomponent* [name]
|   +--rw name      -> ../config/name
|   +--rw config
|     | +--rw name?   -> ../../../../component/config/name
|     +--ro state
|       +--ro name?   -> ../../../../component/config/name
+--rw chassis
| +--rw config
| +--ro state
+--rw port
| +--rw config
| +--ro state
| +--rw oc-port:breakout-mode
|   +--rw oc-port:groups
|     +--rw oc-port:group* [index]
|       +--rw oc-port:index   -> ../config/index
|       +--rw oc-port:config
|         | +--rw oc-port:index?   uint8
|         | +--rw oc-port:num-breakouts?   uint8
|         | +--rw oc-port:breakout-speed?   identityref
|         | +--rw oc-port:num-physical-channels?   uint8
|         +--ro oc-port:state
|           +--ro oc-port:index?   uint8
|           +--ro oc-port:num-breakouts?   uint8
|           +--ro oc-port:breakout-speed?   identityref
|           +--ro oc-port:num-physical-channels?   uint8
+--rw power-supply
| +--rw config
| | +--rw oc-platform-psu:enabled?   boolean
| +--ro state
|   +--ro oc-platform-psu:enabled?   boolean
|   +--ro oc-platform-psu:capacity?   oc-types:ieeefloat32
|   +--ro oc-platform-psu:input-current?   oc-types:ieeefloat32
|   +--ro oc-platform-psu:input-voltage?   oc-types:ieeefloat32
|   +--ro oc-platform-psu:output-current?   oc-types:ieeefloat32
|   +--ro oc-platform-psu:output-voltage?   oc-types:ieeefloat32
|   +--ro oc-platform-psu:output-power?   oc-types:ieeefloat32
+--rw fan
| +--rw config
| +--ro state
|   +--ro oc-fan:speed?   uint32
+--rw fabric
| +--rw config
| +--ro state
+--rw storage
| +--rw config
| +--ro state

```

```

+--rw cpu
|   +--rw config
|   +--ro state
|   +--rw oc-cpu:utilization
|       +--ro oc-cpu:state
|           +--ro oc-cpu:instant?      oc-types:percentage
|           +--ro oc-cpu:avg?         oc-types:percentage
|           +--ro oc-cpu:min?         oc-types:percentage
|           +--ro oc-cpu:max?         oc-types:percentage
|           +--ro oc-cpu:interval?    oc-types:stat-interval
|           +--ro oc-cpu:min-time?    oc-types:timeticks64
|           +--ro oc-cpu:max-time?    oc-types:timeticks64
+--rw integrated-circuit
|   +--rw config
|   +--ro state
+--rw backplane
|   +--rw config
|   +--ro state
+--rw software-module
|   +--rw config
|   +--ro state
+--rw oc-transceiver:transceiver
|   +--rw oc-transceiver:config
|       |   +--rw oc-transceiver:enabled?          boolean
|       |   +--rw oc-transceiver:form-factor-preconf?  identityref
|       |   +--rw oc-transceiver:ethernet-pmd-preconf?  identityref
|       |   +--rw oc-transceiver:fec-mode?            identityref
|       |   +--rw oc-transceiver:module-functional-type?  identityref
|       +--ro oc-transceiver:state
|           |   +--ro oc-transceiver:enabled?          boolean
|           |   +--ro oc-transceiver:form-factor-preconf?  identityref
|           |   +--ro oc-transceiver:ethernet-pmd-preconf?  identityref
|           |   +--ro oc-transceiver:fec-mode?            identityref
|           |   +--ro oc-transceiver:module-functional-type?  identityref
|           |   +--ro oc-transceiver:present?            enumeration
|           |   +--ro oc-transceiver:form-factor?        identityref
|           |   +--ro oc-transceiver:connector-type?     identityref
|           |   +--ro oc-transceiver:vendor?             string
|           |   +--ro oc-transceiver:vendor-part?       string
|           |   +--ro oc-transceiver:vendor-rev?        string
|           |   +--ro oc-transceiver:ethernet-pmd?      identityref
|           |   +--ro oc-transceiver:sonet-sdh-compliance-code?  identityref
|           |   +--ro oc-transceiver:otn-compliance-code?  identityref
|           |   +--ro oc-transceiver:serial-no?         string
|           |   +--ro oc-transceiver:date-code?        oc-yang:date-and-time
|           |   +--ro oc-transceiver:fault-condition?    boolean
|           |   +--ro oc-transceiver:fec-status?        identityref
|           |   +--ro oc-transceiver:fec-uncorrectable-blocks?  yang:counter64
|           |   +--ro oc-transceiver:fec-uncorrectable-words?  yang:counter64
|           |   +--ro oc-transceiver:fec-corrected-bytes?    yang:counter64
|           |   +--ro oc-transceiver:fec-corrected-bits?    yang:counter64
|           +--ro oc-transceiver:pre-fec-ber
|               |   +--ro oc-transceiver:instant?      decimal64
|               |   +--ro oc-transceiver:avg?         decimal64
|               |   +--ro oc-transceiver:min?         decimal64
|               |   +--ro oc-transceiver:max?         decimal64
|               |   +--ro oc-transceiver:interval?    oc-types:stat-interval
|               |   +--ro oc-transceiver:min-time?    oc-types:timeticks64
|               |   +--ro oc-transceiver:max-time?    oc-types:timeticks64
|               +--ro oc-transceiver:post-fec-ber
|                   |   +--ro oc-transceiver:instant?      decimal64
|                   |   +--ro oc-transceiver:avg?         decimal64
|                   |   +--ro oc-transceiver:min?         decimal64
|                   |   +--ro oc-transceiver:max?         decimal64

```

```

| | | +--ro oc-transceiver:interval?   oc-types:stat-interval
| | | +--ro oc-transceiver:min-time?   oc-types:timeticks64
| | | +--ro oc-transceiver:max-time?   oc-types:timeticks64
| | +--ro oc-transceiver:output-power
| | | +--ro oc-transceiver:instant?    decimal64
| | | +--ro oc-transceiver:avg?       decimal64
| | | +--ro oc-transceiver:min?       decimal64
| | | +--ro oc-transceiver:max?       decimal64
| | | +--ro oc-transceiver:interval?   oc-types:stat-interval
| | | +--ro oc-transceiver:min-time?   oc-types:timeticks64
| | | +--ro oc-transceiver:max-time?   oc-types:timeticks64
| | +--ro oc-transceiver:input-power
| | | +--ro oc-transceiver:instant?    decimal64
| | | +--ro oc-transceiver:avg?       decimal64
| | | +--ro oc-transceiver:min?       decimal64
| | | +--ro oc-transceiver:max?       decimal64
| | | +--ro oc-transceiver:interval?   oc-types:stat-interval
| | | +--ro oc-transceiver:min-time?   oc-types:timeticks64
| | | +--ro oc-transceiver:max-time?   oc-types:timeticks64
| | +--ro oc-transceiver:laser-bias-current
| | | +--ro oc-transceiver:instant?    decimal64
| | | +--ro oc-transceiver:avg?       decimal64
| | | +--ro oc-transceiver:min?       decimal64
| | | +--ro oc-transceiver:max?       decimal64
| | | +--ro oc-transceiver:interval?   oc-types:stat-interval
| | | +--ro oc-transceiver:min-time?   oc-types:timeticks64
| | | +--ro oc-transceiver:max-time?   oc-types:timeticks64
| | +--ro extr-transceiver-ext:temperature
| | | +--ro extr-transceiver-ext:avg?   decimal64
| | | +--ro extr-transceiver-ext:min?   decimal64
| | | +--ro extr-transceiver-ext:max?   decimal64
| | | +--ro extr-transceiver-ext:interval? oc-types:stat-interval
| | | +--ro extr-transceiver-ext:min-time? oc-types:timeticks64
| | | +--ro extr-transceiver-ext:max-time? oc-types:timeticks64
| | +--ro extr-transceiver-ext:voltage
| | | +--ro extr-transceiver-ext:avg?   decimal64
| | | +--ro extr-transceiver-ext:min?   decimal64
| | | +--ro extr-transceiver-ext:max?   decimal64
| | | +--ro extr-transceiver-ext:interval? oc-types:stat-interval
| | | +--ro extr-transceiver-ext:min-time? oc-types:timeticks64
| | | +--ro extr-transceiver-ext:max-time? oc-types:timeticks64
| +--rw oc-transceiver:physical-channels
|   +--rw oc-transceiver:channel* [index]
|     +--rw oc-transceiver:index      -> ../config/index
|     +--rw oc-transceiver:config
|       | +--rw oc-transceiver:index?   uint16
|       | +--rw oc-transceiver:associated-optical-channel? -> /oc-
platform:components/component/name
|       | +--rw oc-transceiver:description?   string
|       | +--rw oc-transceiver:tx-laser?     boolean
|       | +--rw oc-transceiver:target-output-power? decimal64
|       +--ro oc-transceiver:state
|         +--ro oc-transceiver:index?   uint16
|         +--ro oc-transceiver:associated-optical-channel? -> /oc-
platform:components/component/name
|       +--ro oc-transceiver:description?   string
|       +--ro oc-transceiver:tx-laser?     boolean
|       +--ro oc-transceiver:target-output-power? decimal64
|       +--ro oc-transceiver:output-frequency? oc-opt-
types:frequency-type
|       +--ro oc-transceiver:output-power
|         | +--ro oc-transceiver:instant?   decimal64
|         | +--ro oc-transceiver:avg?       decimal64
|         | +--ro oc-transceiver:min?       decimal64

```

```

|         | +--ro oc-transceiver:max?          decimal64
|         | +--ro oc-transceiver:interval?    oc-types:stat-interval
|         | +--ro oc-transceiver:min-time?    oc-types:timeticks64
|         | +--ro oc-transceiver:max-time?    oc-types:timeticks64
| +--ro oc-transceiver:input-power
|         | +--ro oc-transceiver:instant?     decimal64
|         | +--ro oc-transceiver:avg?        decimal64
|         | +--ro oc-transceiver:min?        decimal64
|         | +--ro oc-transceiver:max?        decimal64
|         | +--ro oc-transceiver:interval?    oc-types:stat-interval
|         | +--ro oc-transceiver:min-time?    oc-types:timeticks64
|         | +--ro oc-transceiver:max-time?    oc-types:timeticks64
| +--ro oc-transceiver:laser-bias-current
|         | +--ro oc-transceiver:instant?     decimal64
|         | +--ro oc-transceiver:avg?        decimal64
|         | +--ro oc-transceiver:min?        decimal64
|         | +--ro oc-transceiver:max?        decimal64
|         | +--ro oc-transceiver:interval?    oc-types:stat-interval
|         | +--ro oc-transceiver:min-time?    oc-types:timeticks64
|         | +--ro oc-transceiver:max-time?    oc-types:timeticks64
| +--ro extr-transceiver-ext:temperature
|         | +--ro extr-transceiver-ext:avg?    decimal64
|         | +--ro extr-transceiver-ext:min?    decimal64
|         | +--ro extr-transceiver-ext:max?    decimal64
|         | +--ro extr-transceiver-ext:interval? oc-types:stat-interval
|         | +--ro extr-transceiver-ext:min-time? oc-types:timeticks64
|         | +--ro extr-transceiver-ext:max-time? oc-types:timeticks64
| +--ro extr-transceiver-ext:voltage
|         | +--ro extr-transceiver-ext:avg?    decimal64
|         | +--ro extr-transceiver-ext:min?    decimal64
|         | +--ro extr-transceiver-ext:max?    decimal64
|         | +--ro extr-transceiver-ext:interval? oc-types:stat-interval
|         | +--ro extr-transceiver-ext:min-time? oc-types:timeticks64
|         | +--ro extr-transceiver-ext:max-time? oc-types:timeticks64
+--rw oc-linecard:linecard
  +--rw oc-linecard:config
    | +--rw oc-linecard:power-admin-state?    oc-platform-types:component-power-
type
    | +--rw extr-linecard-ext:linecard-type?  linecard
  +--ro oc-linecard:state
    +--ro oc-linecard:power-admin-state?    oc-platform-types:component-power-
type
    +--ro oc-linecard:slot-id?              string
    +--ro extr-linecard-ext:linecard-type?  linecard

module: openconfig-platform-port

  augment /oc-if:interfaces/oc-if:interface/oc-if:state:
    +--ro hardware-port?  -> /oc-platform:components/component/name

module: openconfig-platform-transceiver

  augment /oc-if:interfaces/oc-if:interface/oc-if:state:
    +--ro transceiver?  -> /oc-platform:components/component[oc-
platform:name=current()/../oc-port:hardware-port]/oc-platform:subcomponents/subcomponent/
name
  augment /oc-if:interfaces/oc-if:interface/oc-if:state:
    +--ro physical-channel*  -> /oc-platform:components/component[oc-
platform:name=current()/../oc-transceiver:transceiver]/transceiver/physical-channels/
channel/index

module: openconfig-vlan

  augment /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface:

```

```

+--rw vlan
  +--rw config
  | x--rw vlan-id?  union
  +--ro state
  | x--ro vlan-id?  union
  +--rw match
  | +--rw single-tagged
  | | +--rw config
  | | | +--rw vlan-id?  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro vlan-id?  oc-vlan-types:vlan-id
  | +--rw single-tagged-list
  | | +--rw config
  | | | +--rw vlan-ids*  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro vlan-ids*  oc-vlan-types:vlan-id
  | +--rw single-tagged-range
  | | +--rw config
  | | | +--rw low-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw high-vlan-id?  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro low-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro high-vlan-id?  oc-vlan-types:vlan-id
  | +--rw double-tagged
  | | +--rw config
  | | | +--rw inner-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw outer-vlan-id?  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro inner-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro outer-vlan-id?  oc-vlan-types:vlan-id
  | +--rw double-tagged-inner-list
  | | +--rw config
  | | | +--rw inner-vlan-ids*  oc-vlan-types:vlan-id
  | | | +--rw outer-vlan-id?  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro inner-vlan-ids*  oc-vlan-types:vlan-id
  | |   +--ro outer-vlan-id?  oc-vlan-types:vlan-id
  | +--rw double-tagged-outer-list
  | | +--rw config
  | | | +--rw inner-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw outer-vlan-ids*  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro inner-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro outer-vlan-ids*  oc-vlan-types:vlan-id
  | +--rw double-tagged-inner-range
  | | +--rw config
  | | | +--rw inner-low-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw inner-high-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw outer-vlan-id*  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro inner-low-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro inner-high-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro outer-vlan-id*  oc-vlan-types:vlan-id
  | +--rw double-tagged-outer-range
  | | +--rw config
  | | | +--rw inner-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw outer-low-vlan-id?  oc-vlan-types:vlan-id
  | | | +--rw outer-high-vlan-id?  oc-vlan-types:vlan-id
  | | +--ro state
  | |   +--ro inner-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro outer-low-vlan-id?  oc-vlan-types:vlan-id
  | |   +--ro outer-high-vlan-id?  oc-vlan-types:vlan-id
  | +--rw double-tagged-inner-outer-range
  | +--rw config

```

```

| | +--rw inner-low-vlan-id?   oc-vlan-types:vlan-id
| | +--rw inner-high-vlan-id?  oc-vlan-types:vlan-id
| | +--rw outer-low-vlan-id?   oc-vlan-types:vlan-id
| | +--rw outer-high-vlan-id?  oc-vlan-types:vlan-id
|   +--ro state
|     +--ro inner-low-vlan-id?   oc-vlan-types:vlan-id
|     +--ro inner-high-vlan-id?  oc-vlan-types:vlan-id
|     +--ro outer-low-vlan-id?   oc-vlan-types:vlan-id
|     +--ro outer-high-vlan-id?  oc-vlan-types:vlan-id
+--rw ingress-mapping
| +--rw config
| | +--rw vlan-stack-action?   oc-vlan-types:vlan-stack-action
| | +--rw vlan-id?             oc-vlan-types:vlan-id
| | +--rw tpid?                identityref
| +--ro state
|   +--ro vlan-stack-action?   oc-vlan-types:vlan-stack-action
|   +--ro vlan-id?             oc-vlan-types:vlan-id
|   +--ro tpid?                identityref
+--rw egress-mapping
  +--rw config
  | +--rw vlan-stack-action?   oc-vlan-types:vlan-stack-action
  | +--rw vlan-id?             oc-vlan-types:vlan-id
  | +--rw tpid?                identityref
  +--ro state
    +--ro vlan-stack-action?   oc-vlan-types:vlan-stack-action
    +--ro vlan-id?             oc-vlan-types:vlan-id
    +--ro tpid?                identityref
augment /oc-if:interfaces/oc-if:interface/oc-if:config:
  +--rw tpid? identityref
augment /oc-if:interfaces/oc-if:interface/oc-if:state:
  +--ro tpid? identityref
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet:
  +--rw switched-vlan
  +--rw config
  | +--rw interface-mode?     oc-vlan-types:vlan-mode-type
  | +--rw native-vlan?        oc-vlan-types:vlan-id
  | +--rw access-vlan?        oc-vlan-types:vlan-id
  | +--rw trunk-vlans*        union
  +--ro state
  | +--ro interface-mode?     oc-vlan-types:vlan-mode-type
  | +--ro native-vlan?        oc-vlan-types:vlan-id
  | +--ro access-vlan?        oc-vlan-types:vlan-id
  | +--ro trunk-vlans*        union
augment /oc-if:interfaces/oc-if:interface/oc-lag:aggregation:
  +--rw switched-vlan
  +--rw config
  | +--rw interface-mode?     oc-vlan-types:vlan-mode-type
  | +--rw native-vlan?        oc-vlan-types:vlan-id
  | +--rw access-vlan?        oc-vlan-types:vlan-id
  | +--rw trunk-vlans*        union
  +--ro state
  | +--ro interface-mode?     oc-vlan-types:vlan-mode-type
  | +--ro native-vlan?        oc-vlan-types:vlan-id
  | +--ro access-vlan?        oc-vlan-types:vlan-id
  | +--ro trunk-vlans*        union
augment /oc-if:interfaces/oc-if:interface:
  +--rw routed-vlan
  +--rw config
  | +--rw vlan? union
  +--ro state
  | +--ro vlan? union
  +--rw oc-ip:ipv4
  | +--rw oc-ip:addresses
  | | +--rw oc-ip:address* [ip]

```

```

| | +--rw oc-ip:ip -> ../config/ip
| | +--rw oc-ip:config
| | | +--rw oc-ip:ip? oc-inet:ipv4-address
| | | +--rw oc-ip:prefix-length? uint8
| | +--ro oc-ip:state
| | | +--ro oc-ip:ip? oc-inet:ipv4-address
| | | +--ro oc-ip:prefix-length? uint8
| | | +--ro oc-ip:origin? ip-address-origin
| | +--rw oc-ip:vrrp
| | | +--rw oc-ip:vrrp-group* [virtual-router-id]
| | | | +--rw oc-ip:vrrp:virtual-router-id -> ../config/virtual-router-id
| | | | +--rw oc-ip:config
| | | | | +--rw oc-ip:virtual-router-id? uint8
| | | | | +--rw oc-ip:virtual-address* oc-inet:ip-address
| | | | | +--rw oc-ip:priority? uint8
| | | | | +--rw oc-ip:preempt? boolean
| | | | | +--rw oc-ip:preempt-delay? uint16
| | | | | +--rw oc-ip:accept-mode? boolean
| | | | | +--rw oc-ip:advertisement-interval? uint16
| | | | +--ro oc-ip:state
| | | | | +--ro oc-ip:virtual-router-id? uint8
| | | | | +--ro oc-ip:virtual-address* oc-inet:ip-address
| | | | | +--ro oc-ip:priority? uint8
| | | | | +--ro oc-ip:preempt? boolean
| | | | | +--ro oc-ip:preempt-delay? uint16
| | | | | +--ro oc-ip:accept-mode? boolean
| | | | | +--ro oc-ip:advertisement-interval? uint16
| | | | | +--ro oc-ip:current-priority? uint8
| | | +--rw oc-ip:interface-tracking
| | | | +--rw oc-ip:config
| | | | | +--rw oc-ip:track-interface* -> /oc-if:interfaces/
interface/name
| | | +--rw oc-ip:priority-decrement? uint8
| | | +--ro oc-ip:state
| | | | +--ro oc-ip:track-interface* -> /oc-if:interfaces/
interface/name
| | | | +--ro oc-ip:priority-decrement? uint8
| | +--rw oc-ip:proxy-arp
| | | +--rw oc-ip:config
| | | | +--rw oc-ip:mode? enumeration
| | | | +--ro oc-ip:state
| | | | | +--ro oc-ip:mode? enumeration
| | +--rw oc-ip:neighbors
| | | +--rw oc-ip:neighbor* [ip]
| | | | +--rw oc-ip:ip -> ../config/ip
| | | | +--rw oc-ip:config
| | | | | +--rw oc-ip:ip? oc-inet:ipv4-address
| | | | | +--rw oc-ip:link-layer-address oc-yang:phys-address
| | | | +--ro oc-ip:state
| | | | | +--ro oc-ip:ip? oc-inet:ipv4-address
| | | | | +--ro oc-ip:link-layer-address oc-yang:phys-address
| | | | | +--ro oc-ip:origin? neighbor-origin
| | +--rw oc-ip:unnumbered
| | | +--rw oc-ip:config
| | | | +--rw oc-ip:enabled? boolean
| | | | +--ro oc-ip:state
| | | | | +--ro oc-ip:enabled? boolean
| | | +--rw oc-ip:interface-ref
| | | | +--rw oc-ip:config
| | | | | +--rw oc-ip:interface? -> /oc-if:interfaces/interface/name
| | | | | +--rw oc-ip:subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
| | | | +--ro oc-ip:state
| | | | +--ro oc-ip:interface? -> /oc-if:interfaces/interface/name

```



```

| |      +--ro oc-ip:subinterface?  -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
| +--rw oc-ip:config
| | +--rw oc-ip:enabled?           boolean
| | +--rw oc-ip:mtu?              uint16
| | +--rw oc-ip:dhcp-client?      boolean
| +--ro oc-ip:state
|   +--ro oc-ip:enabled?          boolean
|   +--ro oc-ip:mtu?              uint16
|   +--ro oc-ip:dhcp-client?      boolean
|   +--ro oc-ip:counters
|     +--ro oc-ip:in-pkts?         oc-yang:counter64
|     +--ro oc-ip:in-octets?       oc-yang:counter64
|     +--ro oc-ip:in-error-pkts?   oc-yang:counter64
|     +--ro oc-ip:in-forwarded-pkts? oc-yang:counter64
|     +--ro oc-ip:in-forwarded-octets? oc-yang:counter64
|     +--ro oc-ip:in-discarded-pkts? oc-yang:counter64
|     +--ro oc-ip:out-pkts?        oc-yang:counter64
|     +--ro oc-ip:out-octets?      oc-yang:counter64
|     +--ro oc-ip:out-error-pkts?   oc-yang:counter64
|     +--ro oc-ip:out-forwarded-pkts? oc-yang:counter64
|     +--ro oc-ip:out-forwarded-octets? oc-yang:counter64
|     +--ro oc-ip:out-discarded-pkts? oc-yang:counter64
+--rw oc-ip:ipv6
  +--rw oc-ip:addresses
  | +--rw oc-ip:address* [ip]
  |   +--rw oc-ip:ip              -> ../config/ip
  |   +--rw oc-ip:config
  |     | +--rw oc-ip:ip?          oc-inet:ipv6-address
  |     | +--rw oc-ip:prefix-length uint8
  |     +--ro oc-ip:state
  |       | +--ro oc-ip:ip?        oc-inet:ipv6-address
  |       | +--ro oc-ip:prefix-length uint8
  |       | +--ro oc-ip:origin?     ip-address-origin
  |       | +--ro oc-ip:status?     enumeration
  |     +--rw oc-ip:vrrp
  |       +--rw oc-ip:vrrp-group* [virtual-router-id]
  |         +--rw oc-ip:virtual-router-id -> ../config/virtual-router-id
  |         +--rw oc-ip:config
  |           | +--rw oc-ip:virtual-router-id?   uint8
  |           | +--rw oc-ip:virtual-address*     oc-inet:ip-address
  |           | +--rw oc-ip:priority?            uint8
  |           | +--rw oc-ip:preempt?            boolean
  |           | +--rw oc-ip:preempt-delay?      uint16
  |           | +--rw oc-ip:accept-mode?        boolean
  |           | +--rw oc-ip:advertisement-interval? uint16
  |           | +--rw oc-ip:virtual-link-local? oc-inet:ip-address
  |           +--ro oc-ip:state
  |             | +--ro oc-ip:virtual-router-id?   uint8
  |             | +--ro oc-ip:virtual-address*     oc-inet:ip-address
  |             | +--ro oc-ip:priority?            uint8
  |             | +--ro oc-ip:preempt?            boolean
  |             | +--ro oc-ip:preempt-delay?      uint16
  |             | +--ro oc-ip:accept-mode?        boolean
  |             | +--ro oc-ip:advertisement-interval? uint16
  |             | +--ro oc-ip:current-priority?   uint8
  |             | +--ro oc-ip:virtual-link-local? oc-inet:ip-address
  |           +--rw oc-ip:interface-tracking
  |             +--rw oc-ip:config
  |               | +--rw oc-ip:track-interface* -> /oc-if:interfaces/
interface/name
  |
  |   +--rw oc-ip:priority-decrement? uint8
  |   +--ro oc-ip:state
  |     +--ro oc-ip:track-interface* -> /oc-if:interfaces/

```

```

interface/name
|
|         +---ro oc-ip:priority-decrement?  uint8
+---rw oc-ip:router-advertisement
| +---rw oc-ip:config
| | +---rw oc-ip:interval?  uint32
| | +---rw oc-ip:lifetime?  uint32
| | +---rw oc-ip:suppress?  boolean
| +---ro oc-ip:state
|   +---ro oc-ip:interval?  uint32
|   +---ro oc-ip:lifetime?  uint32
|   +---ro oc-ip:suppress?  boolean
+---rw oc-ip:neighbors
| +---rw oc-ip:neighbor* [ip]
|   +---rw oc-ip:ip          -> ../config/ip
|   +---rw oc-ip:config
|     | +---rw oc-ip:ip?          oc-inet:ipv6-address
|     | +---rw oc-ip:link-layer-address  oc-yang:phys-address
|     +---ro oc-ip:state
|       +---ro oc-ip:ip?          oc-inet:ipv6-address
|       +---ro oc-ip:link-layer-address  oc-yang:phys-address
|       +---ro oc-ip:origin?       neighbor-origin
|       +---ro oc-ip:is-router?     boolean
|       +---ro oc-ip:neighbor-state?  enumeration
+---rw oc-ip:unnumbered
| +---rw oc-ip:config
| | +---rw oc-ip:enabled?  boolean
| +---ro oc-ip:state
| | +---ro oc-ip:enabled?  boolean
| +---rw oc-ip:interface-ref
|   +---rw oc-ip:config
|     | +---rw oc-ip:interface?    -> /oc-if:interfaces/interface/name
|     | +---rw oc-ip:subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
|     +---ro oc-ip:state
|       +---ro oc-ip:interface?    -> /oc-if:interfaces/interface/name
|       +---ro oc-ip:subinterface? -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
+---rw oc-ip:config
| +---rw oc-ip:enabled?          boolean
| +---rw oc-ip:mtu?              uint32
| +---rw oc-ip:dup-addr-detect-transmits?  uint32
| +---rw oc-ip:dhcp-client?     boolean
+---ro oc-ip:state
  +---ro oc-ip:enabled?          boolean
  +---ro oc-ip:mtu?              uint32
  +---ro oc-ip:dup-addr-detect-transmits?  uint32
  +---ro oc-ip:dhcp-client?     boolean
  +---ro oc-ip:counters
    +---ro oc-ip:in-pkts?        oc-yang:counter64
    +---ro oc-ip:in-octets?      oc-yang:counter64
    +---ro oc-ip:in-error-pkts?  oc-yang:counter64
    +---ro oc-ip:in-forwarded-pkts?  oc-yang:counter64
    +---ro oc-ip:in-forwarded-octets?  oc-yang:counter64
    +---ro oc-ip:in-discarded-pkts?  oc-yang:counter64
    +---ro oc-ip:out-pkts?       oc-yang:counter64
    +---ro oc-ip:out-octets?     oc-yang:counter64
    +---ro oc-ip:out-error-pkts?  oc-yang:counter64
    +---ro oc-ip:out-forwarded-pkts?  oc-yang:counter64
    +---ro oc-ip:out-forwarded-octets?  oc-yang:counter64
    +---ro oc-ip:out-discarded-pkts?  oc-yang:counter64

module: openconfig-system
  +---rw system
    +---rw config

```

```

|   +--rw hostname?          oc-inet:domain-name
|   +--rw domain-name?      oc-inet:domain-name
|   +--rw login-banner?     string
|   +--rw motd-banner?      string
+--ro state
|   +--ro hostname?         oc-inet:domain-name
|   +--ro domain-name?     oc-inet:domain-name
|   +--ro login-banner?    string
|   +--ro motd-banner?     string
|   +--ro current-datetime? oc-yang:date-and-time
|   +--ro boot-time?       oc-types:timeticks64
+--rw clock
|   +--rw config
|   |   +--rw timezone-name?  timezone-name-type
|   +--ro state
|   |   +--ro timezone-name?  timezone-name-type
+--rw dns
|   +--rw config
|   |   +--rw search*        oc-inet:domain-name
|   +--ro state
|   |   +--ro search*        oc-inet:domain-name
|   +--rw servers
|   |   +--rw server* [address]
|   |   |   +--rw address    -> ../config/address
|   |   |   +--rw config
|   |   |   |   +--rw address?  oc-inet:ip-address
|   |   |   |   +--rw port?    oc-inet:port-number
|   |   |   +--ro state
|   |   |   |   +--ro address?  oc-inet:ip-address
|   |   |   |   +--ro port?    oc-inet:port-number
+--rw ntp
|   +--rw config
|   |   +--rw enabled?        boolean
|   |   +--rw ntp-source-address?  oc-inet:ip-address
|   |   +--rw enable-ntp-auth?    boolean
|   +--ro state
|   |   +--ro enabled?          boolean
|   |   +--ro ntp-source-address?  oc-inet:ip-address
|   |   +--ro enable-ntp-auth?    boolean
|   +--rw ntp-keys
|   |   +--rw ntp-key* [key-id]
|   |   |   +--rw key-id    -> ../config/key-id
|   |   |   +--rw config
|   |   |   |   +--rw key-id?      uint16
|   |   |   |   +--rw key-type?    identityref
|   |   |   |   +--rw key-value?   string
|   |   |   +--ro state
|   |   |   |   +--ro key-id?      uint16
|   |   |   |   +--ro key-type?    identityref
|   |   |   |   +--ro key-value?   string
|   +--rw servers
|   |   +--rw server* [address]
|   |   |   +--rw address    -> ../config/address
|   |   |   +--rw config
|   |   |   |   +--rw address?      oc-inet:host
|   |   |   |   +--rw port?        oc-inet:port-number
|   |   |   |   +--rw version?     uint8
|   |   |   |   +--rw association-type?  enumeration
|   |   |   |   +--rw iburst?      boolean
|   |   |   |   +--rw prefer?      boolean
|   |   |   +--ro state
|   |   |   |   +--ro address?      oc-inet:host
|   |   |   |   +--ro port?        oc-inet:port-number
|   |   |   |   +--ro version?     uint8

```

```

|           +--ro association-type?  enumeration
|           +--ro iburst?             boolean
|           +--ro prefer?             boolean
+--rw logging
| +--rw remote-servers
| | +--rw remote-server* [host]
| | | +--rw host          -> ../config/host
| | | +--rw config
| | | | +--rw host?      oc-inet:host
| | | | +--rw source-address?  oc-inet:ip-address
| | | | +--rw remote-port?    oc-inet:port-number
| | | | +--rw extr-system-logging-ext:transport?  syslog-remote-server-transport
| | | | +--rw extr-system-logging-ext:secure-forwarding?  syslog-remote-server-secure-forwarding
| | | | +--ro state
| | | | +--ro host?      oc-inet:host
| | | | +--ro source-address?  oc-inet:ip-address
| | | | +--ro remote-port?    oc-inet:port-number
| | | | +--ro extr-system-logging-ext:transport?  syslog-remote-server-transport
| | | | +--ro extr-system-logging-ext:secure-forwarding?  syslog-remote-server-secure-forwarding
| | | | +--rw extr-system-logging-ext:ca-cert?  string
| | | +--rw extr-system-logging-ext:services
| | | | +--rw extr-system-logging-ext:service* [facility]
| | | | | +--rw extr-system-logging-ext:facility  -> ../config/facility
| | | | | +--rw extr-system-logging-ext:config
| | | | | | +--rw extr-system-logging-ext:facility?  identityref
| | | | | | +--rw extr-system-logging-ext:severity?  syslog-severity
| | | | | +--ro extr-system-logging-ext:state
| | | | | +--ro extr-system-logging-ext:facility?  identityref
| | | | | +--ro extr-system-logging-ext:severity?  syslog-severity
+--rw aaa
| +--rw authentication
| | +--rw config
| | | +--rw authentication-method*  union
| | | +--ro state
| | | | +--ro authentication-method*  union
| | | +--rw users
| | | | +--rw user* [username]
| | | | | +--rw username  -> ../config/username
| | | | | +--rw config
| | | | | | +--rw username?  string
| | | | | | +--rw password?  string
| | | | | | +--rw password-hashed?  oc-aaa-types:crypt-password-type
| | | | | | +--rw role?  union
| | | | | +--ro state
| | | | | +--ro username?  string
| | | | | +--ro password?  string
| | | | | +--ro password-hashed?  oc-aaa-types:crypt-password-type
| | | | | +--ro role?  union
| | +--rw accounting
| | | +--rw config
| | | | +--rw accounting-method*  union
| | | | +--ro state
| | | | | +--ro accounting-method*  union
| | | +--rw events
| | | | +--rw event* [event-type]
| | | | | +--rw event-type  -> ../config/event-type
| | | | | +--rw config
| | | | | | +--rw event-type?  identityref
| | | | | | +--rw record?  enumeration
| | | | | +--ro state

```

```

| |           +--ro event-type?  identityref
| |           +--ro record?      enumeration
| +--rw server-groups
|   +--rw server-group* [name]
|     +--rw name          -> ../config/name
|     +--rw config
|       | +--rw name?     string
|       | +--rw type?    identityref
|       +--ro state
|         | +--ro name?   string
|         | +--ro type?  identityref
|       +--rw servers
|         +--rw server* [address]
|           +--rw address  -> ../config/address
|           +--rw config
|             | +--rw name?     string
|             | +--rw address?  oc-inet:ip-address
|             +--ro state
|               | +--ro name?   string
|               | +--ro address? oc-inet:ip-address
|             +--rw tacacs
|               +--rw config
|                 | +--rw secret-key?      oc-types:routing-password
|                 | +--rw secret-key-hashed? oc-aaa-types:crypt-password-type
|                 +--ro state
|                   +--ro secret-key?      oc-types:routing-password
|                   +--ro secret-key-hashed? oc-aaa-types:crypt-password-type
+--rw messages
| +--rw config
| | +--rw severity?  oc-log:syslog-severity
| +--ro state
| | +--ro severity?  oc-log:syslog-severity
| | +--ro message
| |   +--ro msg?     string
| |   +--ro priority? uint8
| |   +--ro app-name? string
| |   +--ro procid?  string
| |   +--ro msgid?   string
+--rw debug-entries
  +--rw debug-service* [service]
    +--rw service      -> ../config/service
    +--rw config
      | +--rw service?  identityref
      | +--rw enabled?  boolean
      +--ro state
        +--ro service?  identityref
        +--ro enabled?  boolean
+--rw license
  +--rw licenses
    +--rw license* [license-id]
      +--rw license-id  -> ../config/license-id
      +--rw config
        | +--rw license-id?  string
        | +--rw license-data? union
        | +--rw active?     boolean
        +--ro state
          +--ro license-id?  string
          +--ro license-data? union
          +--ro active?     boolean
          +--ro description? string
          +--ro issue-date?  uint64
          +--ro expiration-date? uint64
          +--ro in-use?     boolean
          +--ro expired?    boolean

```

```

        +--ro valid?          boolean

module: openconfig-qos
  +--rw qos
    +--rw config
    +--ro state
    +--rw interfaces
      | +--rw interface* [interface-id]
      |   +--rw interface-id  -> ../config/interface-id
      |   +--rw config
      |     | +--rw interface-id?  string
      |     +--ro state
      |     | +--ro interface-id?  string
      |     +--rw output
      |       +--rw queues
      |         +--rw queue* [name]
      |           +--rw name      -> ../config/name
      |           +--rw config
      |             | +--rw name?   string
      |             +--ro state
      |               +--ro name?   string
      |               +--ro transmit-pkts?  oc-yang:counter64
      |               +--ro transmit-octets? oc-yang:counter64
      |               +--ro dropped-pkts?   oc-yang:counter64
      +--rw forwarding-groups
        | +--rw forwarding-group* [name]
        |   +--rw name      -> ../config/name
        |   +--rw config
        |     | +--rw name?           string
        |     | +--rw output-queue?   -> ../../../../../../queues/queue/config/name
        |     | +--rw extr-qos-ext:description? string
        |     +--ro state
        |       +--ro name?           string
        |       +--ro output-queue?   -> ../../../../../../queues/queue/config/name
        |       +--ro extr-qos-ext:description? string
        +--rw queues
          +--rw queue* [name]
            +--rw name      -> ../config/name
            +--rw config
            | +--rw name?   string
            +--ro state
            +--ro name?   string

module: openconfig-if-ethernet-ext

augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:state/oc-eth:counters:
  +--ro in-distribution
    +--ro in-frames-64-octets?      oc-yang:counter64
    +--ro in-frames-65-127-octets?  oc-yang:counter64
    +--ro in-frames-128-255-octets? oc-yang:counter64
    +--ro in-frames-256-511-octets? oc-yang:counter64
    +--ro in-frames-512-1023-octets? oc-yang:counter64
    +--ro in-frames-1024-1518-octets? oc-yang:counter64

```

## BFD Module Support

```

module openconfig-bfd-deviations {

  namespace
    "http://extremenetworks.com/yang/openconfig-bfd-deviations";

  prefix "oc-bfd-dev";
}

```

```

import openconfig-extensions { prefix oc-ext; }
import openconfig-bfd { prefix oc-bfd; }

organization "Extreme Networks, Inc.";

contact
  "Extreme Networks, Inc.
  www.extremenetworks.com";

description
  "This module describes the deviations from openconfig-bfd v0.10.2";

oc-ext:openconfig-version "1.0.0";

revision "2024-07-05" {
  description
    "Initial version.";
  reference "1.0.0";
}

deviation /oc-bfd:bfd {
  deviate not-supported;
}
}

```

## Defined Sets Module Support

```

module openconfig-defined-sets-deviations {

  namespace
    "http://extremenetworks.com/yang/openconfig-defined-sets-deviations";

  prefix "oc-sets-dev";

  import openconfig-defined-sets { prefix "oc-sets"; }
  import openconfig-extensions { prefix oc-ext; }

  organization "Extreme Networks, Inc.";

  contact
    "Extreme Networks, Inc.
    www.extremenetworks.com";

  description
    "This module describes the deviations from openconfig-defined-sets v1.0.0";

  oc-ext:openconfig-version "1.0.0";

  revision "2024-10-01" {
    description
      "Initial version.";
    reference "1.0.0";
  }

  deviation /oc-sets:defined-sets {
    deviate not-supported;
  }
}

```

## Interfaces Module Support

```
module openconfig-interfaces-deviations {  
  
  namespace  
    "http://extremenetworks.com/yang/openconfig-interfaces-deviations";  
  
  prefix "oc-int-dev";  
  
  import openconfig-interfaces { prefix "oc-if"; }  
  import openconfig-if-ip { prefix "oc-ip"; }  
  import openconfig-if-ip-ext { prefix "oc-ip-ext"; }  
  import openconfig-vlan { prefix "oc-vlan"; }  
  import openconfig-if-ethernet { prefix oc-eth; }  
  import openconfig-if-tunnel { prefix oc-tun; }  
  import openconfig-if-aggregate { prefix oc-lag; }  
  import openconfig-extensions { prefix oc-ext; }  
  
  organization "Extreme Networks, Inc.";  
  
  contact  
    "Extreme Networks, Inc.  
    www.extremenetworks.com";  
  
  description  
    "This module describes the deviations from openconfig-interfaces v2.4.3";  
  
  oc-ext:openconfig-version "1.0.0";  
  
  revision "2021-06-04" {  
    description  
      "Initial version.";  
    reference "1.0.0";  
  }  
  
  deviation /oc-if:interfaces/oc-if:interface/oc-if:state/oc-if:logical {  
    deviate not-supported;  
  }  
  
  deviation /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface/oc-  
ip:ipv4/oc-ip:addresses/oc-ip:address/oc-ip:vrmp {  
    deviate not-supported;  
  }  
  
  deviation /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface/oc-  
ip:ipv4/oc-ip:proxy-arp {  
    deviate not-supported;  
  }  
  
  deviation /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface/oc-  
ip:ipv4/oc-ip:unnumbered {  
    deviate not-supported;  
  }  
  
  deviation /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface/oc-  
ip:ipv6/oc-ip:addresses/oc-ip:address/oc-ip:vrmp {  
    deviate not-supported;  
  }  
  
  deviation /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface/oc-  
ip:ipv6/oc-ip:router-advertisement {  
    deviate not-supported;  
  }  
}
```



```
    deviation /oc-if:interfaces/oc-if:interface/oc-if:subinterfaces/oc-if:subinterface/oc-
ip:ipv6/oc-ip:unnumbered {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-vlan:routed-vlan/oc-ip:ipv4/oc-
ip:addresses/oc-ip:address/oc-ip:vrrp {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-vlan:routed-vlan/oc-ip:ipv4/oc-
ip:proxy-arp {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-vlan:routed-vlan/oc-ip:ipv4/oc-
ip:unnumbered {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-vlan:routed-vlan/oc-ip:ipv6/oc-
ip:addresses/oc-ip:address/oc-ip:vrrp {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-vlan:routed-vlan/oc-ip:ipv6/oc-
ip:router-advertisement {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-vlan:routed-vlan/oc-ip:ipv6/oc-
ip:unnumbered {

        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-tun:tunnel/oc-tun:ipv4/oc-tun:proxy-
arp {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-tun:tunnel/oc-tun:ipv4/oc-
tun:unnumbered {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-tun:tunnel/oc-tun:ipv6/oc-tun:router-
advertisement {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-tun:tunnel/oc-tun:ipv6/oc-
tun:unnumbered {

        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-vlan:switched-vlan {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-lag:aggregation/oc-vlan:switched-vlan {
        deviate not-supported;
    }
```

```

    }

    deviation /oc-if:interfaces/oc-if:interface/oc-if:hold-time {
        deviate not-supported;
    }
    deviation /oc-if:interfaces/oc-if:interface/oc-tun:tunnel/oc-tun:config/oc-tun:gre-
key {
        deviate not-supported;
    }

    deviation /oc-if:interfaces/oc-if:interface/oc-tun:tunnel/oc-tun:state/oc-tun:gre-key
{
        deviate not-supported;
    }
}

```

## LLDP Module Support

```

module openconfig-lldp-deviations {

    namespace
        "http://extremenetworks.com/yang/openconfig-lldp-deviations";

    prefix "oc-lldp-dev";

    import openconfig-lldp { prefix "oc-lldp"; }
    import openconfig-extensions { prefix oc-ext; }
    import extreme-lldp-ext { prefix "extr-lldp-ext"; }

    organization "Extreme Networks, Inc.";

    contact
        "Extreme Networks, Inc.
        www.extremenetworks.com";

    description
        "This module describes the deviations from openconfig-lldp v0.1.1";

    oc-ext:openconfig-version "1.0.0";

    revision "2021-10-04" {
        description
            "Initial version.";
        reference "1.0.0";
    }
    deviation "/oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/extr-lldp-ext:fabric-
extend" {
        deviate not-supported;
    }
    deviation "/oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:neighbors/oc-
lldp:neighbor/oc-lldp:state/oc-lldp:age" {
        deviate not-supported;
    }
    deviation "/oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:neighbors/oc-
lldp:neighbor/oc-lldp:custom-tlvs/oc-lldp:tlv/extr-lldp-ext:addresses" {
        deviate not-supported;
    }
}

```

## Network Instance Module Support

```

module openconfig-network-instance-deviations {
  namespace
    "http://extremenetworks.com/yang/openconfig-network-instance-deviations";

  prefix "oc-net-dev";

  import openconfig-network-instance { prefix "oc-net"; }
  import openconfig-extensions { prefix oc-ext; }

  organization "Extreme Networks, Inc.";

  contact
    "Extreme Networks, Inc.
    www.extremenetworks.com";

  description
    "This module describes the deviations from openconfig-network-instance v0.10.2";

  oc-ext:openconfig-version "1.0.0";

  revision "2021-06-04" {
    description
      "Initial version.";
    reference "1.0.0";
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:encapsulation {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:inter-instance-
policies {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:route-limits {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:mpls {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:segment-routing {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:policy-forwarding {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:afts {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-
net:protocol/oc-net:local-aggregates {
    deviate not-supported;
  }

  deviation /oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-

```

```

net:protocol/oc-net:ospfv2 {
    deviate not-supported;
}

    deviation /oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-
net:protocol/oc-net:isis {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-
net:protocol/oc-net:pcep" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:l2rib"
{
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:mac-
table/oc-net:entries/oc-net:entry/oc-net:state/oc-net:age" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:mac-
table/oc-net:entries/oc-net:entry/oc-net:state/oc-net:entry-type" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:mac-
table/oc-net:entries/oc-net:entry/oc-net:state/oc-net:evi" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:arp-
proxy/oc-net:config/oc-net:enable" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:arp-
proxy/oc-net:state/oc-net:enable" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:nd-
proxy/oc-net:config/oc-net:enable" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb/oc-net:nd-
proxy/oc-net:state/oc-net:enable" {
    deviate not-supported;
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-
net:protocol/oc-net:static-routes/oc-net:static/oc-net:config/oc-net:set-tag" {
    deviate replace {
        type uint32;
    }
}

    deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-
net:protocol/oc-net:static-routes/oc-net:static/oc-net:state/oc-net:set-tag" {
    deviate replace {

```

```

        type uint32;
    }
}

deviation "/oc-net:network-instances/oc-net:network-
instance/oc-net:protocols/oc-net:protocol/oc-net:static-routes/oc-net:static/oc-net:next-
hops/oc-net:next-hop/oc-net:config/oc-net:recurse" {
    deviate replace {
        default true;
    }
}

deviation "/oc-net:network-instances/oc-net:network-
instance/oc-net:protocols/oc-net:protocol/oc-net:static-routes/oc-net:static/oc-net:next-
hops/oc-net:next-hop/oc-net:state/oc-net:recurse" {
    deviate replace {
        default true;
    }
}

deviation "/oc-net:network-instances/oc-net:network-
instance/oc-net:protocols/oc-net:protocol/oc-net:static-routes/oc-net:static/oc-net:next-
hops/oc-net:next-hop/oc-net:enable-bfd" {
    deviate not-supported;
}

deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:fdb" {
    deviate not-supported;
}
deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:config/oc-
net:route-distinguisher" {
    deviate not-supported;
}
deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:state/oc-
net:route-distinguisher" {
    deviate not-supported;
}
deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:table-connections/
oc-net:table-connection/oc-net:config/oc-net:import-policy" {
    deviate not-supported;
}
deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:table-connections/
oc-net:table-connection/oc-net:state/oc-net:import-policy" {
    deviate not-supported;
}
deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:protocols/oc-
net:protocol/oc-net:bgp" {
    deviate not-supported;
}

deviation "/oc-net:network-instances/oc-net:network-instance/oc-net:evpn" {
    deviate not-supported;
}
}

```

## Optical Transport Module Support

```

module openconfig-optical-transport-deviations {
    namespace
        "http://extremenetworks.com/yang/openconfig-optical-transport-deviations";

    prefix "oc-opt-trans-dev";
}

```

```

import openconfig-transport-line-protection { prefix "oc-line-protect"; }
import openconfig-channel-monitor { prefix "oc-chan-monitor"; }
import openconfig-transport-line-connectivity { prefix "oc-line-connect"; }
import openconfig-optical-amplifier { prefix "oc-opt-amp"; }
import openconfig-optical-attenuator { prefix "oc-opt-att"; }
import openconfig-terminal-device { prefix "oc-opt-term"; }
import openconfig-wavelength-router { prefix "oc-wave-router"; }
import openconfig-extensions { prefix oc-ext; }

organization "Extreme Networks, Inc.";

contact
  "Extreme Networks, Inc.
  www.extremenetworks.com";

description
  "This module describes the deviations from openconfig-transport-line-protection
v0.1.0";

oc-ext:openconfig-version "1.0.0";

revision "2024-09-25" {
  description
    "Initial version.";
  reference "1.0.0";
}

deviation /oc-line-protect:aps {
  deviate not-supported;
}
deviation /oc-chan-monitor:channel-monitors {
  deviate not-supported;
}
deviation /oc-line-connect:connections {
  deviate not-supported;
}
deviation /oc-opt-amp:optical-amplifier {
  deviate not-supported;
}
deviation /oc-opt-att:optical-attenuator {
  deviate not-supported;
}
deviation /oc-opt-term:terminal-device {
  deviate not-supported;
}
deviation /oc-wave-router:wavelength-router {
  deviate not-supported;
}
}

```

## Platform Module Support

```

module openconfig-platform-deviations {

  namespace
    "http://extremenetworks.com/yang/openconfig-platform-deviations";

  prefix "oc-plat-dev";

  import openconfig-platform { prefix "oc-platform"; }
  import openconfig-alarms { prefix "oc-alarms"; }
  import openconfig-extensions { prefix oc-ext; }
}

```

```

organization "Extreme Networks, Inc.";

contact
  "Extreme Networks, Inc.
  www.extremenetworks.com";

description
  "This module describes the deviations from openconfig-platform v0.11.0";

oc-ext:openconfig-version "1.0.0";

revision "2021-06-04" {
  description
    "Initial version.";
  reference "1.0.0";
}

deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:allocated-power {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:description {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:empty {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
alarms:equipment-failure {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
alarms:equipment-mismatch {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:firmware-version {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:hardware-version {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:memory {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:mfg-date {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:mfg-name {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:oper-status {
  deviate not-supported;
}
deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:parent {

```

```

        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:removable {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:serial-no {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:software-version {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:temperature {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:state/oc-
platform:used-power {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:backplane {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:chassis {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:fabric {
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:integrated-circuit
{
        deviate not-supported;
    }
    deviation /oc-platform:components/oc-platform:component/oc-platform:storage {
        deviate not-supported;
    }
}

```

## Routing Policy Module Support

```

module openconfig-routing-policy-deviations {
    namespace
        "http://extremenetworks.com/yang/openconfig-routing-policy-deviations";

    prefix "oc-rpol-dev";

    import openconfig-extensions { prefix oc-ext; }
    import openconfig-routing-policy { prefix "oc-rpol"; }

    organization "Extreme Networks, Inc.";

    contact
        "Extreme Networks, Inc.
        www.extremenetworks.com";

    description
        "This module describes the deviations from openconfig-routing-policy v0.10.2";

    oc-ext:openconfig-version "1.0.0";
}

```



```

revision "2024-07-05" {
  description
    "Initial version.";
  reference "1.0.0";
}

deviation /oc-rpol:routing-policy {
  deviate not-supported;
}

```

## System Module Support

```

module openconfig-system-deviations {

  namespace
    "http://extremenetworks.com/yang/openconfig-system-deviations";

  prefix "oc-sys-dev";

  import openconfig-system { prefix "oc-sys"; }
  import openconfig-extensions { prefix oc-ext; }
  import extreme-system-ext { prefix "extr-sys-ext"; }

  organization "Extreme Networks, Inc.";

  contact
    "Extreme Networks, Inc.
    www.extremenetworks.com";

  description
    "This module describes the deviations from openconfig-system";

  oc-ext:openconfig-version "1.0.0";

  revision "2021-06-04" {
    description
      "Initial version.";
    reference "1.0.0";
  }

  deviation /oc-sys:system/oc-sys:alarms {
    deviate not-supported;
  }

  deviation /oc-sys:system/oc-sys:cpus {
    deviate not-supported;
  }

  deviation /oc-sys:system/oc-sys:memory {
    deviate not-supported;
  }

  deviation /oc-sys:system/oc-sys:processes {
    deviate not-supported;
  }

  deviation /oc-sys:system/oc-sys:dns/oc-sys:host-entries {
    deviate not-supported;
  }

  deviation "/oc-sys:system/oc-sys:logging/oc-sys:remote-servers/" +

```

```

        "oc-sys:remote-server/oc-sys:selectors" {
    deviate not-supported;
}

deviation /oc-sys:system/oc-sys:aaa/oc-sys:config {
    deviate not-supported;
}

deviation /oc-sys:system/oc-sys:aaa/oc-sys:state {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:authentication/" +
    "oc-sys:users/oc-sys:user/oc-sys:config/oc-sys:ssh-key" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:authentication/" +
    "oc-sys:users/oc-sys:user/oc-sys:state/oc-sys:ssh-key" {
    deviate not-supported;
}

deviation /oc-sys:system/oc-sys:aaa/oc-sys:authorization {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
    "/oc-sys:config/oc-sys:timeout" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server/" +
    "oc-sys:state/oc-sys:timeout" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
    "/oc-sys:state/oc-sys:connection-opens" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
    "/oc-sys:state/oc-sys:connection-closes" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
    "/oc-sys:state/oc-sys:connection-aborts" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
    "/oc-sys:state/oc-sys:connection-failures" {
    deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
    "oc-sys:server-group/oc-sys:servers/oc-sys:server" +

```

```
"/oc-sys:state/oc-sys:connection-timeouts" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups" +
"/oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:state/oc-sys:messages-sent" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server/" +
"oc-sys:state/oc-sys:messages-received" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:state/oc-sys:errors-received" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:tacacs/oc-sys:config/oc-sys:source-address" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:tacacs/oc-sys:state/oc-sys:source-address" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:tacacs/oc-sys:config/oc-sys:port" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:tacacs/oc-sys:state/oc-sys:port" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:radius/oc-sys:config/oc-sys:auth-port" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:radius/oc-sys:state/oc-sys:auth-port" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
"oc-sys:server-group/oc-sys:servers/oc-sys:server" +
"/oc-sys:radius/oc-sys:config/oc-sys:acct-port" {
  deviate not-supported;
}
```

```

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:radius/oc-sys:state/oc-sys:acct-port" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:radius/oc-sys:config/oc-sys:source-address" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:radius/oc-sys:state/oc-sys:source-address" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:radius/oc-sys:config/oc-sys:secret-key-hashed" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server/" +
  "oc-sys:radius/oc-sys:state/oc-sys:secret-key-hashed" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups" +
  "/oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:radius/oc-sys:config/oc-sys:retransmit-attempts" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server/" +
  "oc-sys:radius/oc-sys:state/oc-sys:retransmit-attempts" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server/" +
  "oc-sys:radius/oc-sys:state/oc-sys:counters" {
  deviate not-supported;
}

deviation /oc-sys:system/oc-sys:ssh-server {
  deviate not-supported;
}

deviation /oc-sys:system/oc-sys:telnet-server {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:ntp/oc-sys:state/" +
  "oc-sys:auth-mismatch" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:ntp/oc-sys:ntp-keys" {
  deviate not-supported;
}

```

```
deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:tacacs/oc-sys:config/oc-sys:secret-key-hashed" {
  deviate not-supported;
}

deviation "/oc-sys:system/oc-sys:aaa/oc-sys:server-groups/" +
  "oc-sys:server-group/oc-sys:servers/oc-sys:server" +
  "/oc-sys:tacacs/oc-sys:state/oc-sys:secret-key-hashed" {
  deviate not-supported;
}

deviation "/oc-sys:system/extr-sys-ext:global/extr-sys-ext:config" +
  "/extr-sys-ext:mac-aging-time" {
  deviate not-supported;
}

deviation "/oc-sys:system/extr-sys-ext:global/extr-sys-ext:state" +
  "/extr-sys-ext:mac-aging-time" {
  deviate not-supported;
}
// mac-move-detection is the only container under l2
// and hence deviating l2
deviation "/oc-sys:system/extr-sys-ext:global/extr-sys-ext:l2" {
  deviate not-supported;
}

deviation /oc-sys:system/oc-sys:license {
  deviate not-supported;
}
}
```

# Extreme YANG Tree

```
module: extreme-snmp
  +--rw snmp
    +--rw communities
      | +--rw community* [community-name]
      |   +--rw community-name   -> ../config/community-name
      |   +--rw config
      |     | +--rw community-name? string
      |     +--rw state
      |       +--rw community-name? string
    +--rw notification-recipients
      | +--rw notification-recipient* [hostname community-or-user-name]
      |   +--rw hostname           -> ../config/hostname
      |   +--rw community-or-user-name -> ../config/community-or-user-name
      |   +--rw config
      |     | +--rw hostname?          oc-inet-types:host
      |     | +--rw community-or-user-name? string
      |     | +--rw udp-port?         uint16
      |     | +--rw notif-type?      notification-type
      |     +--rw state
      |       +--rw hostname?          oc-inet-types:host
      |       +--rw community-or-user-name? string
      |       +--rw udp-port?         uint16
      |       +--rw notif-type?      notification-type
    +--rw users
      +--rw user* [name]
      +--rw name           -> ../config/name
      +--rw config
      | +--rw name?       string
      | +--rw auth        auth-type
      | +--rw auth-key?   string
      | +--rw priv?       priv-type
      | +--rw priv-key?   string
      +--rw state
      +--rw name?         string
      +--rw auth          auth-type
      +--rw auth-key?     string
      +--rw priv?         priv-type
      +--rw priv-key?     string

module: extreme-lag-ext

augment /oc-if:interfaces/oc-if:interface/oc-lag:aggregation/oc-lag:state:
  +--ro member-list*          oc-if:base-interface-ref
  +--ro active-member-list*   oc-if:base-interface-ref
  +--ro lag-load-balance-method? aggregation-load-balance-method
  +--ro lag-load-balance-method-custom* aggregation-load-balance-method-custom

augment /oc-if:interfaces/oc-if:interface/oc-lag:aggregation/oc-lag:config:
  +--rw lag-load-balance-method? aggregation-load-balance-method
  +--rw lag-load-balance-method-custom* aggregation-load-balance-method-custom

module: extreme-pcap
  +--ro pcap
  +--ro files
```

```

    +--ro file* [name]
      +--ro name      -> ../state/name
      +--ro state
        +--ro name?          string
        +--ro last-modified-time?  oc-types:timeticks64
        +--ro size?          uint32
        +--ro packet-count?     uint32

module: extreme-lacp-ext

augment /oc-if:interfaces/oc-if:interface/oc-lag:aggregation/oc-lag:config:
  +--rw max-bundle?  uint16
augment /oc-if:interfaces/oc-if:interface/oc-lag:aggregation/oc-lag:state:
  +--ro max-bundle?  uint16
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:config:
  +--rw port-priority?  uint16
  +--rw interval?      oc-lacp:lacp-period-type
  +--rw lacp-mode?     oc-lacp:lacp-activity-type
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:state:
  +--ro port-priority?  uint16
  +--ro interval?      oc-lacp:lacp-period-type
  +--ro lacp-mode?     oc-lacp:lacp-activity-type

module: extreme-acl-ext

augment /oc-acl:acl/oc-acl:config:
  +--rw count?  boolean
augment /oc-acl:acl/oc-acl:state:
  +--ro count?  boolean
augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry/
oc-acl:actions/oc-acl:config:
  +--rw count?  boolean
augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry/
oc-acl:actions/oc-acl:state:
  +--ro count?  boolean
augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry/
oc-acl:actions/oc-acl:config:
  +--rw qos-forwarding-group?  qos-forwarding-group-name-ref
augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry/
oc-acl:actions/oc-acl:state:
  +--ro qos-forwarding-group?  qos-forwarding-group-name-ref

module: extreme-tunnel-encap
+--rw tunnel-encaps
  +--rw tunnel-encap* [name]
    +--rw name      -> ../config/name
    +--rw config
      | +--rw name?          string
      | +--rw description?  string
      | +--rw source-ipv4-addr?  oc-inet:ipv4-address
      | +--rw source-ipv6-addr?  oc-inet:ipv6-address
      | +--rw destination-ipv4-addr?  oc-inet:ipv4-address
      | +--rw destination-ipv6-addr?  oc-inet:ipv6-address
      | +--rw source-mac-addr?  oc-yang:mac-address
      | +--rw destination-mac-addr?  oc-yang:mac-address
      | +--rw tunnel-type?      common-types:egress-encap-type
      | +--rw tunnel-id?       uint32
      | +--rw vlan-tag?        uint16
      | +--rw vlan-pcp?        uint8
    +--ro state
      +--ro name?          string
      +--ro description?  string
      +--ro source-ipv4-addr?  oc-inet:ipv4-address
      +--ro source-ipv6-addr?  oc-inet:ipv6-address

```

```

    +--ro destination-ipv4-addr?  oc-inet:ipv4-address
    +--ro destination-ipv6-addr?  oc-inet:ipv6-address
    +--ro source-mac-addr?        oc-yang:mac-address
    +--ro destination-mac-addr?   oc-yang:mac-address
    +--ro tunnel-type?            common-types:egress-encap-type
    +--ro tunnel-id?              uint32
    +--ro vlan-tag?               uint16
    +--ro vlan-pcp?               uint8
    +--ro counter* [port-id]
      +--ro port-id               uint32
      +--ro pkt-count?            uint64
      +--ro octet-count?          uint64

module: extreme-eth-ext

augment /oc-if:interfaces/oc-if:interface/oc-if:state:
  +--ro if-mib
    +--ro if-last-change? string
augment /oc-if:interfaces/oc-if:interface/oc-if:state/oc-if:counters:
  +--ro if-mib-counter
    +--ro if-counter-discontinuity-time? string
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:config:
  +--rw fec
    +--rw fec-mode? fec-mode-type
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:state:
  +--ro fec
    +--ro fec-mode? fec-mode-type
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:config:
  +--rw link-fault-signaling? boolean
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:state:
  +--ro link-fault-signaling? boolean
  +--ro link-fault-status? string
  +--ro local-fault-count? uint64
  +--ro remote-fault-count? uint64
  +--ro last-local-fault? oc-types:timeticks64
  +--ro last-remote-fault? oc-types:timeticks64
augment /oc-if:interfaces/oc-if:interface/oc-eth:ethernet/oc-eth:state/oc-eth:counters:
  +--ro bandwidth-utilization
    +--ro in-pkts-per-sec? uint64
    +--ro out-pkts-per-sec? uint64
    +--ro in-bits-per-sec? uint64
    +--ro out-bits-per-sec? uint64

module: extreme-acl-ipv4-ext

augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry:
  +--rw npb-acl-ipv4
    +--rw config
      | +--rw source-ipv4? oc-inet:ipv4-address
      | +--rw source-ipv4-mask? oc-inet:ipv4-address
      | +--rw destination-ipv4? oc-inet:ipv4-address
      | +--rw destination-ipv4-mask? oc-inet:ipv4-address
      | +--rw dscp? oc-inet:dscp
      | +--rw protocol? oc-pkt-match-types:ip-protocol-type
      | +--rw vlan-tag? uint16
      | +--rw network-id-type? identityref
      | +--rw network-id? uint32
      | +--rw length? uint16
      | +--rw length-end? uint16
      | +--rw source-port? oc-pkt-match-types:port-num-range
      | +--rw destination-port? oc-pkt-match-types:port-num-range
      | +--rw tcp-flags* identityref
      | +--rw dont-fragment? boolean
      | +--rw more-fragment? boolean

```



```

| +--rw icmp-type?           uint8
| +--rw icmp-code?          uint8
| +--rw igmp-type?          uint8
| +--rw igmp-group?         uint32
| +--rw esp-spi?            uint32
+--ro state
  +--ro source-ipv4?         oc-inet:ipv4-address
  +--ro source-ipv4-mask?    oc-inet:ipv4-address
  +--ro destination-ipv4?    oc-inet:ipv4-address
  +--ro destination-ipv4-mask? oc-inet:ipv4-address
  +--ro dscp?                oc-inet:dscp
  +--ro protocol?           oc-pkt-match-types:ip-protocol-type
  +--ro vlan-tag?           uint16
  +--ro network-id-type?    identityref
  +--ro network-id?         uint32
  +--ro length?             uint16
  +--ro length-end?         uint16
  +--ro source-port?         oc-pkt-match-types:port-num-range
  +--ro destination-port?    oc-pkt-match-types:port-num-range
  +--ro tcp-flags*          identityref
  +--ro dont-fragment?      boolean
  +--ro more-fragment?      boolean
  +--ro icmp-type?          uint8
  +--ro icmp-code?          uint8
  +--ro igmp-type?          uint8
  +--ro igmp-group?         uint32
  +--ro esp-spi?            uint32

module: extreme-acl-ipv6-ext

augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry:
  +--rw npb-acl-ipv6
    +--rw config
      | +--rw source-ipv6?         oc-inet:ipv6-address
      | +--rw source-ipv6-mask?    oc-inet:ipv6-address
      | +--rw destination-ipv6?    oc-inet:ipv6-address
      | +--rw destination-ipv6-mask? oc-inet:ipv6-address
      | +--rw dscp?                oc-inet:dscp
      | +--rw protocol?           oc-pkt-match-types:ip-protocol-type
      | +--rw vlan-tag?           uint16
      | +--rw network-id-type?    identityref
      | +--rw network-id?         uint32
      | +--rw length?             uint16
      | +--rw length-end?         uint16
      | +--rw source-port?         oc-pkt-match-types:port-num-range
      | +--rw destination-port?    oc-pkt-match-types:port-num-range
      | +--rw tcp-flags*          identityref
      | +--rw icmp-type?          uint8
      | +--rw icmp-code?          uint8
      | +--rw igmp-type?          uint8
      | +--rw igmp-group?         uint32
      | +--rw esp-spi?            uint32
    +--ro state
      +--ro source-ipv6?         oc-inet:ipv6-address
      +--ro source-ipv6-mask?    oc-inet:ipv6-address
      +--ro destination-ipv6?    oc-inet:ipv6-address
      +--ro destination-ipv6-mask? oc-inet:ipv6-address
      +--ro dscp?                oc-inet:dscp
      +--ro protocol?           oc-pkt-match-types:ip-protocol-type
      +--ro vlan-tag?           uint16
      +--ro network-id-type?    identityref
      +--ro network-id?         uint32
      +--ro length?             uint16
      +--ro length-end?         uint16

```

```

    +--ro source-port?          oc-pkt-match-types:port-num-range
    +--ro destination-port?    oc-pkt-match-types:port-num-range
    +--ro tcp-flags*           identityref
    +--ro icmp-type?           uint8
    +--ro icmp-code?          uint8
    +--ro igmp-type?          uint8
    +--ro igmp-group?         uint32
    +--ro esp-spi?            uint32

module: extreme-acl-mac-ext

augment /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-entry:
  +--rw npb-acl-mac
    +--rw config
      | +--rw source-mac?      oc-yang:mac-address
      | +--rw source-mac-mask? oc-yang:mac-address
      | +--rw destination-mac? oc-yang:mac-address
      | +--rw destination-mac-mask? oc-yang:mac-address
      | +--rw pcp?            uint8
      | +--rw ethertype?     oc-pkt-match-types:ethertype-type
      | +--rw network-id-type? identityref
      | +--rw network-id?    uint32
      | +--rw length?        uint16
      | +--rw vlan-tag?      uint16
    +--ro state
      +--ro source-mac?      oc-yang:mac-address
      +--ro source-mac-mask? oc-yang:mac-address
      +--ro destination-mac? oc-yang:mac-address
      +--ro destination-mac-mask? oc-yang:mac-address
      +--ro pcp?            uint8
      +--ro ethertype?     oc-pkt-match-types:ethertype-type
      +--ro network-id-type? identityref
      +--ro network-id?    uint32
      +--ro length?        uint16
      +--ro vlan-tag?      uint16

module: extreme-egress-group
  +--rw egress-groups
    +--rw egress-group* [name]
      +--rw name             -> ../config/name
      +--rw config
        | +--rw name?       string
        | +--rw description? string
      +--ro state
        | +--ro name?       string
        | +--ro description? string
        | +--ro packet-count? uint64
        | +--ro byte-count?  uint64
    +--rw egress-objects
      +--rw egress-object* [name]
        +--rw name         -> ../config/name
        +--rw config
          | +--rw name?    extreme-egress:egress-ref
        +--ro state
          +--ro name?    extreme-egress:egress-ref

module: extreme-egress
  +--rw egress-objects
    +--rw egress-object* [name]
      +--rw name         -> ../config/name
      +--rw config
        | +--rw name?      string
        | +--rw listener-policy? listener-policy:listener-policy-ref
        | +--rw encap?     tunnel-encap:tunnel-encap-ref

```

```

| +--rw description?      string
+--ro state
| +--ro name?             string
| +--ro listener-policy? listener-policy:listener-policy-ref
| +--ro encap?            tunnel-encap:tunnel-encap-ref
| +--ro description?     string
| +--ro packet-count?    uint64
| +--ro byte-count?      uint64
+--rw interfaces
  +--rw interface* [precedence]
    +--rw precedence      -> ../config/precedence
    +--rw config
      | +--rw precedence?  uint16
      | +--rw interface?  string
    +--ro state
      +--ro precedence?   uint16
      +--ro interface?   string

module: extreme-ingress-group
+--rw ingress-groups
  +--rw ingress-group* [name]
    +--rw name            -> ../config/name
    +--rw config
      | +--rw name?        string
      | +--rw bind-policy? routemap:route-map-ref
      | +--rw description? string
    +--ro state
      | +--ro name?          string
      | +--ro bind-policy?   routemap:route-map-ref
      | +--ro description?   string
      | +--ro packet-count?  uint64
      | +--ro byte-count?    uint64
      | +--ro outer-tunnel-packet-count? uint64
      | +--ro outer-tunnel-byte-count?   uint64
    +--rw tunnels
      +--rw tunnel* [traffic-type]
        | +--rw traffic-type -> ../config/traffic-type
        | +--rw config
          | | +--rw traffic-type?    common-types:sap-trfc-type
          | | +--rw tunnel-id?      uint32
          | | +--rw source-ip-addr?  oc-inet:ip-address
          | | +--rw source-ip-mask?  oc-inet:ip-address
          | | +--rw destination-ip-addr? oc-inet:ip-address
          | | +--rw destination-ip-mask? oc-inet:ip-address
          | | +--rw protocol?        oc-pkt-match-types:ip-protocol-type
          | | +--rw source-port?     oc-inet:port-number
          | | +--rw destination-port? oc-inet:port-number
          | | +--rw scope?           boolean
          | | +--rw decap?           boolean
          | +--ro state
            | +--ro traffic-type?    common-types:sap-trfc-type
            | +--ro tunnel-id?      uint32
            | +--ro source-ip-addr?  oc-inet:ip-address
            | +--ro source-ip-mask?  oc-inet:ip-address
            | +--ro destination-ip-addr? oc-inet:ip-address
            | +--ro destination-ip-mask? oc-inet:ip-address
            | +--ro protocol?        oc-pkt-match-types:ip-protocol-type
            | +--ro source-port?     oc-inet:port-number
            | +--ro destination-port? oc-inet:port-number
            | +--ro scope?           boolean
            | +--ro decap?           boolean
          +--rw outer-tunnel* [traffic-type]
            +--rw traffic-type      -> ../config/traffic-type
            +--rw config

```

```

    | +--rw traffic-type?          common-types:sap-trfc-type
    | +--rw tunnel-id?            uint32
    | +--rw source-ip-addr?       oc-inet:ip-address
    | +--rw source-ip-mask?       oc-inet:ip-address
    | +--rw destination-ip-addr?  oc-inet:ip-address
    | +--rw destination-ip-mask?  oc-inet:ip-address
    | +--rw protocol?             oc-pkt-match-types:ip-protocol-type
    | +--rw source-port?          oc-inet:port-number
    | +--rw destination-port?     oc-inet:port-number
    | +--rw mpls-header* [position]
    | | +--rw position            uint8
    | | +--rw label?             uint32
    | | +--rw traffic-class?     uint8
    | | +--rw time-to-live?      uint8
    | +--rw mirror?              mirror:mirror-ref
    | +--rw log?                 common-types:log-type
+--ro state
  +--ro traffic-type?          common-types:sap-trfc-type
  +--ro tunnel-id?            uint32
  +--ro source-ip-addr?       oc-inet:ip-address
  +--ro source-ip-mask?       oc-inet:ip-address
  +--ro destination-ip-addr?  oc-inet:ip-address
  +--ro destination-ip-mask?  oc-inet:ip-address
  +--ro protocol?             oc-pkt-match-types:ip-protocol-type
  +--ro source-port?          oc-inet:port-number
  +--ro destination-port?     oc-inet:port-number
  +--ro mpls-header* [position]
  | +--ro position            uint8
  | +--ro label?             uint32
  | +--ro traffic-class?     uint8
  | +--ro time-to-live?      uint8
  +--ro mirror?              mirror:mirror-ref
  +--ro log?                 common-types:log-type

augment /oc-if:interfaces/oc-if:interface/oc-if:config:
  +--rw ingress-groups* [ingress-group]
  +--rw ingress-group      ingress-group-ref

module: extreme-listener-policy
+--rw listener-policies
  +--rw listener-policy* [name]
  +--rw name                -> ../config/name
  +--rw config
  | +--rw name?            string
  +--ro state
  | +--ro name?            string
  +--rw listener-policy-instances
  +--rw listener-policy-instance* [sequence-id]
  +--rw sequence-id        -> ../config/sequence-id
  +--rw config
  | +--rw sequence-id?     uint32
  | +--rw permit-deny?    boolean
  | +--rw l2acl?          string
  | +--rw ipv4acl?        string
  | +--rw ipv6acl?        string
  | +--rw truncate?       uint16
  | +--rw strip-vn-tag?   boolean
  | +--rw strip-br-tag?   boolean
  | +--rw strip-vlan-tag? boolean
  | +--rw add-vlan-tag?   uint16
  | +--rw terminate?     boolean
  | +--rw terminate-outer? boolean
  | +--rw terminate-inner? boolean
  | +--rw description?    string

```

```

    +--rw state
      +--rw sequence-id?      uint32
      +--rw permit-deny?     boolean
      +--rw l2acl?           string
      +--rw ipv4acl?         string
      +--rw ipv6acl?         string
      +--rw truncate?        uint16
      +--rw strip-vn-tag?    boolean
      +--rw strip-br-tag?    boolean
      +--rw strip-vlan-tag?  boolean
      +--rw add-vlan-tag?    uint16
      +--rw terminate?      boolean
      +--rw terminate-outer? boolean
      +--rw terminate-inner? boolean
      +--rw description?    string

module: extreme-policy-statistics
+--rw npb-policy-data-sets
  +--rw npb-policy-data-set* [owner]
    +--rw owner      -> ../config/owner
    +--rw config
      | +--rw owner?  identityref
    +--ro state
      | +--ro owner?  identityref
    +--rw policy-stats
      +--rw policy-stat* [sap]
        +--rw sap      -> ../config/sap
        +--rw config
          | +--rw sap?      uint16
          | +--rw sap-name? string
          | +--rw policy?   string
        +--ro state
          | +--ro sap?      uint16
          | +--ro sap-name? string
          | +--ro policy?   string
        +--rw ipv4
          | +--rw acl-stats
          |   +--rw acl-stat* [acl-name]
          |     +--rw acl-name  -> ../config/acl-name
          |     +--rw config
          |       | +--rw acl-name?  string
          |       +--ro state
          |         +--ro acl-name?      string
          |         +--ro acl-stats-entries
          |           +--ro acl-stats-entry* [sequence-id]
          |             +--ro sequence-id  -> ../config/sequence-id
          |             +--ro config
          |               | +--ro sequence-id?  uint32
          |               +--ro state
          |                 +--ro sequence-id?  uint32
          |                 +--ro packet-count? uint64
          |                 +--ro byte-count?   uint64
          |                 +--ro packets-rate? uint64
          |                 +--ro bits-rate?    uint64
        +--rw ipv6
          | +--rw acl-stats
          |   +--rw acl-stat* [acl-name]
          |     +--rw acl-name  -> ../config/acl-name
          |     +--rw config
          |       | +--rw acl-name?  string
          |       +--ro state
          |         +--ro acl-name?      string
          |         +--ro acl-stats-entries
          |           +--ro acl-stats-entry* [sequence-id]

```

```

|             +--ro sequence-id   -> ../config/sequence-id
|             +--ro config
|             | +--ro sequence-id? uint32
|             +--ro state
|             | +--ro sequence-id?  uint32
|             | +--ro packet-count? uint64
|             | +--ro byte-count?   uint64
|             | +--ro packets-rate? uint64
|             | +--ro bits-rate?    uint64
+--rw mac
  +--rw acl-stats
    +--rw acl-stat* [acl-name]
      +--rw acl-name   -> ../config/acl-name
      +--rw config
      | +--rw acl-name? string
      +--ro state
        +--ro acl-name?          string
        +--ro acl-stats-entries
          +--ro acl-stats-entry* [sequence-id]
            +--ro sequence-id   -> ../config/sequence-id
            +--ro config
            | +--ro sequence-id? uint32
            +--ro state
              +--ro sequence-id?  uint32
              +--ro packet-count? uint64
              +--ro byte-count?   uint64
              +--ro packets-rate? uint64
              +--ro bits-rate?    uint64

module: extreme-routemap
+--rw routemaps
  +--rw routemap* [name]
    +--rw name           -> ../config/name
    +--rw config
    | +--rw name?       string
    +--ro state
    | +--ro name?       string
    +--rw routemap-instances
      +--rw routemap-instance* [sequence-id]
        +--rw sequence-id -> ../config/sequence-id
        +--rw config
        | +--rw sequence-id?      uint32
        | +--rw permit-deny?      boolean
        | +--rw l2-acl?           string
        | +--rw ipv4-acl?         string
        | +--rw ipv6-acl?         string
        | +--rw egress-group?     eg-group:egress-group-ref
        | +--rw sfc-id?           uint32
        | +--rw description?      string
        | +--rw truncation-length? uint16
        | +--rw terminate?        boolean
        | +--rw scope-shift?      boolean
        | +--rw qos-forwarding-group? qos-forwarding-group-name-ref
        +--ro state
          +--ro sequence-id?      uint32
          +--ro permit-deny?      boolean
          +--ro l2-acl?           string
          +--ro ipv4-acl?         string
          +--ro ipv6-acl?         string
          +--ro egress-group?     eg-group:egress-group-ref
          +--ro sfc-id?           uint32
          +--ro description?      string
          +--ro truncation-length? uint16
          +--ro terminate?        boolean

```

```

        +--ro scope-shift?          boolean
        +--ro qos-forwarding-group? qos-forwarding-group-name-ref

module: extreme-saps
+--rw saps
  +--rw sap* [name]
    +--rw name                      -> ../config/name
    +--rw config
      | +--rw name?                 string
      | +--rw id                    uint32
      | +--rw traffic-type?         common-types:sap-trfc-type
      | +--rw parent-saps* [parent-sap]
      |   +--rw parent-sap         base-sap-ref
    +--ro state
      | +--ro name?                 string
      | +--ro id                    uint32
      | +--ro traffic-type?         common-types:sap-trfc-type
      | +--ro parent-saps* [parent-sap]
      |   +--ro parent-sap         base-sap-ref
    +--rw port-sap
      | +--rw config
        | | +--rw port-names* [port-name]
        | | | +--rw port-name      string
        | | +--rw port-ids* [port-id]
        | | | +--rw port-id        uint16
        | | +--rw sfp-path-id?     uint16
        | | +--rw sfp-path-index?  uint8
        | +--ro state
        |   +--ro port-names* [port-name]
        |   | +--ro port-name      string
        |   +--ro port-ids* [port-id]
        |   | +--ro port-id        uint16
        |   +--ro sfp-path-id?     uint16
        |   +--ro sfp-path-index?  uint8
    +--rw vxlan-sap
      | +--rw config
        | | +--rw vni?              uint32
        | | +--rw scope?            boolean
        | | +--rw terminate?        boolean
        | | +--rw source-ip-addr?   oc-inet:ip-address
        | | +--rw source-ip-mask?   oc-inet:ip-address
        | | +--rw destination-ip-addr? oc-inet:ip-address
        | | +--rw destination-ip-mask? oc-inet:ip-address
        | | +--rw protocol?         oc-pkt-match-types:ip-protocol-type
        | | +--rw source-port?      oc-inet:port-number
        | | +--rw destination-port? oc-inet:port-number
        | +--ro state
        |   +--ro vni?              uint32
        |   +--ro scope?            boolean
        |   +--ro terminate?        boolean
        |   +--ro source-ip-addr?   oc-inet:ip-address
        |   +--ro source-ip-mask?   oc-inet:ip-address
        |   +--ro destination-ip-addr? oc-inet:ip-address
        |   +--ro destination-ip-mask? oc-inet:ip-address
        |   +--ro protocol?         oc-pkt-match-types:ip-protocol-type
        |   +--ro source-port?      oc-inet:port-number
        |   +--ro destination-port? oc-inet:port-number
        |   +--ro out-tunnel-hit-pkt-count? uint64
        |   +--ro out-tunnel-hit-octet-count? uint64
    +--rw nvgre-sap
      | +--rw config
        | | +--rw vsid?             uint32
        | | +--rw scope?            boolean
        | | +--rw terminate?        boolean

```

```

| | +--rw source-ip-addr?      oc-inet:ip-address
| | +--rw source-ip-mask?    oc-inet:ip-address
| | +--rw destination-ip-addr? oc-inet:ip-address
| | +--rw destination-ip-mask? oc-inet:ip-address
| | +--rw protocol?          oc-pkt-match-types:ip-protocol-type
| | +--rw source-port?       oc-inet:port-number
| | +--rw destination-port?   oc-inet:port-number
| +--ro state
| | +--ro vsid?               uint32
| | +--ro scope?              boolean
| | +--ro terminate?          boolean
| | +--ro source-ip-addr?     oc-inet:ip-address
| | +--ro source-ip-mask?    oc-inet:ip-address
| | +--ro destination-ip-addr? oc-inet:ip-address
| | +--ro destination-ip-mask? oc-inet:ip-address
| | +--ro protocol?           oc-pkt-match-types:ip-protocol-type
| | +--ro source-port?        oc-inet:port-number
| | +--ro destination-port?   oc-inet:port-number
| | +--ro out-tunnel-hit-pkt-count? uint64
| | +--ro out-tunnel-hit-octet-count? uint64
+--rw ipgre-sap
| +--rw config
| | +--rw scope?              boolean
| | +--rw terminate?          boolean
| | +--rw source-ip-addr?     oc-inet:ip-address
| | +--rw source-ip-mask?    oc-inet:ip-address
| | +--rw destination-ip-addr? oc-inet:ip-address
| | +--rw destination-ip-mask? oc-inet:ip-address
| | +--rw protocol?           oc-pkt-match-types:ip-protocol-type
| | +--rw source-port?        oc-inet:port-number
| | +--rw destination-port?   oc-inet:port-number
| +--ro state
| | +--ro scope?              boolean
| | +--ro terminate?          boolean
| | +--ro source-ip-addr?     oc-inet:ip-address
| | +--ro source-ip-mask?    oc-inet:ip-address
| | +--ro destination-ip-addr? oc-inet:ip-address
| | +--ro destination-ip-mask? oc-inet:ip-address
| | +--ro protocol?           oc-pkt-match-types:ip-protocol-type
| | +--ro source-port?        oc-inet:port-number
| | +--ro destination-port?   oc-inet:port-number
| | +--ro out-tunnel-hit-pkt-count? uint64
| | +--ro out-tunnel-hit-octet-count? uint64
+--rw gtpu-sap
| +--rw config
| | +--rw teid?               uint32
| | +--rw scope?              boolean
| | +--rw terminate?          boolean
| | +--rw source-ip-addr?     oc-inet:ip-address
| | +--rw source-ip-mask?    oc-inet:ip-address
| | +--rw destination-ip-addr? oc-inet:ip-address
| | +--rw destination-ip-mask? oc-inet:ip-address
| | +--rw protocol?           oc-pkt-match-types:ip-protocol-type
| | +--rw source-port?        oc-inet:port-number
| | +--rw destination-port?   oc-inet:port-number
| +--ro state
| | +--ro teid?               uint32
| | +--ro scope?              boolean
| | +--ro terminate?          boolean
| | +--ro source-ip-addr?     oc-inet:ip-address
| | +--ro source-ip-mask?    oc-inet:ip-address
| | +--ro destination-ip-addr? oc-inet:ip-address
| | +--ro destination-ip-mask? oc-inet:ip-address
| | +--ro protocol?           oc-pkt-match-types:ip-protocol-type

```



```

|     +--ro source-port?                oc-inet:port-number
|     +--ro destination-port?          oc-inet:port-number
|     +--ro out-tunnel-hit-pkt-count?  uint64
|     +--ro out-tunnel-hit-octet-count? uint64
+--rw ipip-sap
|   +--rw config
|   |   +--rw scope?                    boolean
|   |   +--rw terminate?               boolean
|   |   +--rw source-ip-addr?          oc-inet:ip-address
|   |   +--rw source-ip-mask?          oc-inet:ip-address
|   |   +--rw destination-ip-addr?    oc-inet:ip-address
|   |   +--rw destination-ip-mask?    oc-inet:ip-address
|   |   +--rw protocol?                oc-pkt-match-types:ip-protocol-type
|   |   +--rw source-port?             oc-inet:port-number
|   |   +--rw destination-port?       oc-inet:port-number
|   +--ro state
|   |   +--ro scope?                    boolean
|   |   +--ro terminate?               boolean
|   |   +--ro source-ip-addr?          oc-inet:ip-address
|   |   +--ro source-ip-mask?          oc-inet:ip-address
|   |   +--ro destination-ip-addr?    oc-inet:ip-address
|   |   +--ro destination-ip-mask?    oc-inet:ip-address
|   |   +--ro protocol?                oc-pkt-match-types:ip-protocol-type
|   |   +--ro source-port?             oc-inet:port-number
|   |   +--ro destination-port?       oc-inet:port-number
|   |   +--ro out-tunnel-hit-pkt-count? uint64
|   |   +--ro out-tunnel-hit-octet-count? uint64
+--rw intermediate-sap
|   +--rw config
|   |   +--rw source-ip-addr?          oc-inet:ip-address
|   |   +--rw source-ip-mask?          oc-inet:ip-address
|   |   +--rw destination-ip-addr?    oc-inet:ip-address
|   |   +--rw destination-ip-mask?    oc-inet:ip-address
|   |   +--rw protocol?                oc-pkt-match-types:ip-protocol-type
|   |   +--rw source-port?             oc-inet:port-number
|   |   +--rw destination-port?       oc-inet:port-number
|   |   +--rw mpls-header* [position]
|   |   |   +--rw position              uint8
|   |   |   +--rw label?                uint32
|   |   |   +--rw traffic-class?        uint8
|   |   |   +--rw time-to-live?         uint8
|   |   +--rw tunnel-type?              common-types:sap-trfc-type
|   |   +--rw tunnel-id?                uint32
|   |   +--rw mirror?                   mirror:mirror-ref
|   |   +--rw log?                       common-types:log-type
|   +--ro state
|   |   +--ro source-ip-addr?          oc-inet:ip-address
|   |   +--ro source-ip-mask?          oc-inet:ip-address
|   |   +--ro destination-ip-addr?    oc-inet:ip-address
|   |   +--ro destination-ip-mask?    oc-inet:ip-address
|   |   +--ro protocol?                oc-pkt-match-types:ip-protocol-type
|   |   +--ro source-port?             oc-inet:port-number
|   |   +--ro destination-port?       oc-inet:port-number
|   |   +--ro mpls-header* [position]
|   |   |   +--ro position              uint8
|   |   |   +--ro label?                uint32
|   |   |   +--ro traffic-class?        uint8
|   |   |   +--ro time-to-live?         uint8
|   |   +--ro tunnel-type?              common-types:sap-trfc-type
|   |   +--ro tunnel-id?                uint32
|   |   +--ro mirror?                   mirror:mirror-ref
|   |   +--ro log?                       common-types:log-type
|   |   +--ro hit-pkt-count?            uint64
|   |   +--ro hit-octet-count?          uint64

```

```

    |   +--ro drop-pkt-count?      uint64
    |   +--ro drop-octet-count?   uint64
+--rw network-sap
  +--rw config
    |   +--rw tunnel-type?      common-types:sap-trfc-type
    |   +--rw tunnel-id?       uint32
  +--ro state
    +--ro tunnel-type?          common-types:sap-trfc-type
    +--ro tunnel-id?           uint32
    +--ro hit-pkt-count?       uint64
    +--ro hit-octet-count?     uint64

module: extreme-sfcs
+--rw sfcs
  +--rw sfc* [name]
    |   +--rw name                -> ../config/name
    |   +--rw config
    |   |   +--rw name?          string
    |   |   +--rw id?           uint32
    |   |   +--rw sfc-hopcnt?   uint8
    |   +--ro state
    |   |   +--ro name?         string
    |   |   +--ro id?          uint32
    |   |   +--ro sfc-hopcnt?  uint8
    |   |   +--ro packet-count? uint64
    |   |   +--ro byte-count?  uint64
    |   +--rw sf-refs
    |   |   +--rw sf-ref* [sf-name]
    |   |   |   +--rw sf-name    -> ../config/sf-name
    |   |   |   +--rw config
    |   |   |   |   +--rw sf-name? string
    |   |   |   |   +--rw sfc-hop?  uint8
    |   |   |   +--ro state
    |   |   |   |   +--ro sf-name?  string
    |   |   |   |   +--ro sfc-hop?  uint8
    |   +--rw sf-paths
    |   |   +--rw sf-path* [sf-path-id]
    |   |   |   +--rw sf-path-id  -> ../config/sf-path-id
    |   |   |   +--rw config
    |   |   |   |   +--rw sf-path-id?  uint32
    |   |   |   +--ro state
    |   |   |   |   +--ro sf-path-id?  uint32
    |   |   +--rw sf-inst-refs
    |   |   |   +--rw sf-inst-ref* [sf-inst-name]
    |   |   |   |   +--rw sf-inst-name  -> ../config/sf-inst-name
    |   |   |   |   +--rw config
    |   |   |   |   |   +--rw sf-inst-name?  string
    |   |   |   |   |   +--rw hop?          uint8
    |   |   |   |   |   +--rw sf-nexthop?    uint16
    |   |   |   |   |   +--rw sf-egr-lagport-name? string
    |   |   |   |   |   +--rw sf-egr-lagportid? uint32
    |   |   |   |   |   +--rw dsap-id?      uint16
    |   |   |   |   |   +--rw encap-name?   string
    |   |   |   |   |   +--rw precedence?   uint16
    |   |   |   |   +--ro state
    |   |   |   |   |   +--ro sf-inst-name?  string
    |   |   |   |   |   +--ro hop?          uint8
    |   |   |   |   |   +--ro sf-nexthop?    uint16
    |   |   |   |   |   +--ro sf-egr-lagport-name? string
    |   |   |   |   |   +--ro sf-egr-lagportid? uint32
    |   |   |   |   |   +--ro dsap-id?      uint16
    |   |   |   |   |   +--ro encap-name?   string
    |   |   |   |   |   +--ro precedence?   uint16
    |   +--rw sfc-groups

```

```

+--rw sfc-group* [name]
  +--rw name          -> ../config/name
  +--rw config
  | +--rw name?       string
  | +--rw num-sfc?   uint8
  +--ro state
  | +--ro name?      string
  | +--ro num-sfc?   uint8
  +--rw sfc-refs
    +--rw sfc-ref* [name]
      +--rw name      -> ../config/name
      +--rw config
      | +--rw name?   sfc-ref
      +--ro state
      +--ro name?    sfc-ref

module: extreme-sfs
+--rw sfs
  +--rw sf* [name]
    +--rw name          -> ../config/name
    +--rw config
    | +--rw name?       string
    | +--rw type?       enumeration
    +--ro state
    | +--ro name?      string
    | +--ro type?      enumeration
    +--rw instances
      +--rw instance* [name]
        +--rw name      -> ../config/name
        +--rw config
        | +--rw name?   string
        +--ro state
        | +--ro name?   string
        +--rw basic-sf
        | +--rw config
        | | +--rw name?  string
        | +--ro state
        | | +--ro name?  string
        | +--rw saps
        |   +--rw sap* [name]
        |     +--rw name      -> ../config/name
        |     +--rw config
        |     | +--rw name?      string
        |     | +--rw apply-policy? string
        |     | +--rw sap-ref?   saps:base-sap-ref
        |     +--ro state
        |     +--ro name?        string
        |     +--ro apply-policy? string
        |     +--ro sap-ref?     saps:base-sap-ref
        +--rw tgtproxy-sf
        +--rw config
        | +--rw name?   string
        +--ro state
        | +--ro name?   string
        +--rw dsaps
          +--rw dsap* [name]
            +--rw name      -> ../config/name
            +--rw config
            | +--rw name?      string
            | +--rw id         uint16
            | +--rw apply-policy? string
            +--ro state
            +--ro name?        string
            +--ro id           uint16

```

```

        +--ro apply-policy?  string

module: extreme-transport-tunnel
  +--rw transport-tunnels
    +--rw transport-tunnel* [name]
      +--rw name              -> ../config/name
      +--rw config
        | +--rw name?          string
        | +--rw description?   string
        | +--rw source-ipv4-addr?  oc-inet:ipv4-address
        | +--rw source-ipv4-mask?  oc-inet:ipv4-address
        | +--rw source-ipv6-addr?  oc-inet:ipv6-address
        | +--rw source-ipv6-mask?  oc-inet:ipv6-address
        | +--rw destination-ipv4-addr?  oc-inet:ipv4-address
        | +--rw destination-ipv4-mask?  oc-inet:ipv4-address
        | +--rw destination-ipv6-addr?  oc-inet:ipv6-address
        | +--rw destination-ipv6-mask?  oc-inet:ipv6-address
        | +--rw tunnel-type?        common-types:sap-trfc-type
        | +--rw tunnel-id?          uint32
      +--ro state
        | +--ro name?             string
        | +--ro description?      string
        | +--ro source-ipv4-addr?  oc-inet:ipv4-address
        | +--ro source-ipv4-mask?  oc-inet:ipv4-address
        | +--ro source-ipv6-addr?  oc-inet:ipv6-address
        | +--ro source-ipv6-mask?  oc-inet:ipv6-address
        | +--ro destination-ipv4-addr?  oc-inet:ipv4-address
        | +--ro destination-ipv4-mask?  oc-inet:ipv4-address
        | +--ro destination-ipv6-addr?  oc-inet:ipv6-address
        | +--ro destination-ipv6-mask?  oc-inet:ipv6-address
        | +--ro tunnel-type?        common-types:sap-trfc-type
        | +--ro tunnel-id?          uint32
        | +--ro packet-count?       uint64
        | +--ro byte-count?         uint64
      +--rw ingress-groups
        +--rw ingress-group* [name]
          +--rw name              -> ../config/name
          +--rw config
            | +--rw name?          ig-group:ingress-group-ref
          +--ro state
            +--ro name?           ig-group:ingress-group-ref

module: extreme-mirror
  +--rw mirrors
    +--rw mirror* [name]
      +--rw name                  -> ../config/name
      +--rw config
        | +--rw name?             string
        | +--rw description?       string
        | +--rw direction?         common-types:mirror-direction-type
      +--ro state
        | +--ro name?             string
        | +--ro description?       string
        | +--ro direction?         common-types:mirror-direction-type
        | +--ro mirror-id?         uint32
      +--rw mirror-dest-ports
        +--rw mirror-dest-port* [interface]
          +--rw interface          -> ../config/interface
          +--rw config
            | +--rw interface?     string
          +--ro state
            +--ro interface?       string

```



# Glossary

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