



# Extreme 9920 Software YANG Reference Guide

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# 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 ExtremeSwitching 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</b> names	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>
Words in italicized type	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</b> text	Bold text indicates command names, keywords, and command options.
<i>italic</i> text	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</i> [ <i>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 white papers, data sheets, and case studies

Extreme Networks offers product training courses, both online and in person, as well as specialized certifications. For details, visit [www.extremenetworks.com/education/](http://www.extremenetworks.com/education/).

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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 2826. 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

## Subscribe to Product Announcements

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

1. Go to [The Hub](#).
2. In the list of categories, expand the **Product Announcements** list.
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.

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## Send Feedback

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The Information Development 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, do either of the following:

- Access the feedback form at <https://www.extremenetworks.com/documentation-feedback/>.
- Email us at [documentation@extremenetworks.com](mailto:documentation@extremenetworks.com).

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your 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 21.1.2.0.

**Table 4: Summary of changes**

Description	Topic
New topic	<a href="#">LLDP Module Support</a> on page 31
New topic	<a href="#">QoS Module Support</a> on page 36
Updated topic	<a href="#">Standard OpenConfig YANG Tree</a> on page 9

For more information about this release, see the [Extreme 9920 Software Release Notes, 21.1.2.0](#).





# Standard OpenConfig YANG

- [Standard OpenConfig YANG Tree on page 9](#)
- [ACL Module Support on page 29](#)
- [Interfaces Module Support on page 31](#)
- [LLDP Module Support on page 31](#)
- [Network Instance Module Support on page 32](#)
- [Platform Module Support on page 34](#)
- [QoS Module Support on page 36](#)
- [System Module Support on page 38](#)

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

## Standard OpenConfig YANG Tree

Extreme Networks has extended some of the OpenConfig YANG files. The corresponding leaf tokens are listed in this tree with the following tag: `extr-<module-name>`.

```
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
    |     +--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?              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-
  | | | +--ro activity?           lacp-activity-
  | | | +--ro timeout?           lacp-timeout-type
  | | | +--ro synchronization?   lacp-
  | | | +--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
+--ro extr-lacp-ext:partner-churn-machine? churn-machine-
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
+--ro extr-lacp-ext:partner-cds-churn-machine? churn-machine-
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

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: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
|   |   |   +--rw 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

```

## ACL Module Support

The Extreme 9920 software with the NPB application supports `openconfig-acl.yang, v1.0.1`, with the following deviations.

```

module extreme-openconfig-acl-deviations {

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

  prefix "extr-oc-acl-dev";

  import openconfig-acl { prefix "oc-acl"; }

  organization "Extreme Networks, Inc.";

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

  description
    "This module describes the deviations from openconfig-acl v1.0.1";

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

```

```
    deviation /oc-acl:acl/oc-acl:state/oc-acl:counter-capability {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:config/oc-acl:description
    {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:state/oc-acl:description {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:config/oc-acl:description {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:state/oc-acl:description {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:state/oc-acl:matched-packets {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:state/oc-acl:matched-octets {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:l2 {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:ipv4 {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:ipv6 {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:transport {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:acl-sets/oc-acl:acl-set/oc-acl:acl-entries/oc-acl:acl-
    entry/oc-acl:input-interface {
        deviate not-supported;
    }

    deviation /oc-acl:acl/oc-acl:interfaces {
        deviate not-supported;
    }
}
```

## Interfaces Module Support

The Extreme 9920 software with the NPB application supports `openconfig-interfaces.yang`, v2.4.3, with the following deviations.

```
module extreme-openconfig-interfaces-deviations {  
    namespace  
        "http://extremenetworks.com/yang/openconfig-interfaces-deviations";  
  
    prefix "extr-oc-int-dev";  
  
    import openconfig-interfaces { prefix "oc-if"; }  
  
    organization "Extreme Networks, Inc.";  
  
    contact  
        "Extreme Networks, Inc.  
        www.extremenetworks.com";  
  
    description  
        "This module describes the deviations from openconfig-interfaces v2.4.3";  
  
    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;  
    }  
}
```

## **NEW!** LLDP Module Support

The Extreme 9920 software with the NPB application supports `openconfig-lldp.yang`, v0.1.1, with the following deviations.

```
module extreme-openconfig-lldp-deviations {  
    namespace  
        "http://extremenetworks.com/yang/openconfig-lldp-deviations";  
  
    prefix "extr-oc-lldp-dev";  
  
    import openconfig-lldp { prefix "oc-lldp"; }  
  
    organization "Extreme Networks, Inc.";  
  
    contact  
        "Extreme Networks, Inc.  
        www.extremenetworks.com";  
  
    description  
        "This module describes the deviations from openconfig-lldp v0.1.1";  
  
    revision "2021-10-04" {  
        description  
            "Initial version.";  
        reference "1.0.0";  
    }  
}
```

```

deviation /oc-lldp:lldp/oc-lldp:state/oc-lldp:counters/oc-lldp:entries-aged-out {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:state/oc-lldp:counters/oc-lldp:frame-discard {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:state/oc-lldp:counters/oc-lldp:frame-error-in {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:state/oc-lldp:counters/oc-lldp:tlv-accepted {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:state/oc-lldp:counters/oc-lldp:tlv-discard {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:state/oc-lldp:counters/oc-lldp:tlv-unknown {
    deviate not-supported;
}

deviation /oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:state/oc-
lldp:counters/oc-lldp:frame-discard {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:state/oc-
lldp:counters/oc-lldp:frame-error-in {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:state/oc-
lldp:counters/oc-lldp:frame-error-out {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:state/oc-
lldp:counters/oc-lldp:tlv-discard {
    deviate not-supported;
}
deviation /oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:state/oc-
lldp:counters/oc-lldp:tlv-unknown {
    deviate not-supported;
}

deviation /oc-lldp:lldp/oc-lldp:interfaces/oc-lldp:interface/oc-lldp:neighbors/oc-
lldp:neighbor/oc-lldp:custom-tlvs {
    deviate not-supported;
}
}

```

## Network Instance Module Support

The Extreme 9920 software with the NPB application supports `openconfig-network-instance.yang, v0.10.2`, with the following deviations.

```

module extreme-openconfig-network-instance-deviations {
    namespace
        "http://extremenetworks.com/yang/openconfig-network-instance-deviations";
    prefix "extr-oc-net-dev";
    import openconfig-network-instance { prefix "oc-net"; }
    organization "Extreme Networks, Inc.";
}

```



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

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

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

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:evpn {
  deviate not-supported;
}

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:table-connections {
  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:tables {
  deviate not-supported;
}

deviation /oc-net:network-instances/oc-net:network-instance/oc-net:connection-points {
  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:vllans {
  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:bgp {
    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:pim {
    deviate not-supported;
  }

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

```

## Platform Module Support

The Extreme 9920 software with the NPB application supports `openconfig-platform.yang`, v0.11.0, with the following deviations.

```

module extreme-openconfig-platform-deviations {

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

  prefix "extr-oc-plat-dev";

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

  organization "Extreme Networks, Inc.";

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

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

  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:subcomponents {
        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;
    }
}

```

## **NEW!** QoS Module Support

The Extreme 9920 software with the NPB application supports `openconfig-qos.yang`, v0.5.0, with the following deviations.

```

module extreme-openconfig-qos-deviations {

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

    prefix "extr-oc-qos-dev";

    import openconfig-qos { prefix "oc-qos"; }

    organization "Extreme Networks, Inc.";

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

    description
        "This module describes the deviations from openconfig-qos v0.5.0";

    revision "2021-10-29" {
        description
            "Initial version.";
        reference "1.0.0";
    }

    deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:interface-ref {
        deviate not-supported;
    }

    deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:input {
        deviate not-supported;
    }
}

```

```

}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-qos:config {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-qos:state {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:interface-ref {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:classifiers {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:queues/oc-qos:queue/oc-qos:config/oc-qos:queue-management-profile {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:queues/oc-qos:queue/oc-qos:state/oc-qos:queue-management-profile {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:queues/oc-qos:queue/oc-qos:state/oc-qos:max-queue-len {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:queues/oc-qos:queue/oc-qos:state/oc-qos:avg-queue-len {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:interfaces/oc-qos:interface/oc-qos:output/oc-
qos:scheduler-policy {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:classifiers {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:forwarding-groups/oc-qos:forwarding-group/oc-
qos:config/oc-qos:fabric-priority {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:forwarding-groups/oc-qos:forwarding-group/oc-
qos:config/oc-qos:unicast-output-queue {
    deviate not-supported;
}

deviation /oc-qos:qos/oc-qos:forwarding-groups/oc-qos:forwarding-group/oc-
qos:config/oc-qos:multicast-output-queue {
    deviate not-supported;
}

```

```

    deviation /oc-qos:qos/oc-qos:forwarding-groups/oc-qos:forwarding-group/oc-
qos:state/oc-qos:fabric-priority {
        deviate not-supported;
    }

    deviation /oc-qos:qos/oc-qos:forwarding-groups/oc-qos:forwarding-group/oc-
qos:state/oc-qos:unicast-output-queue {
        deviate not-supported;
    }

    deviation /oc-qos:qos/oc-qos:forwarding-groups/oc-qos:forwarding-group/oc-
qos:state/oc-qos:multicast-output-queue {
        deviate not-supported;
    }

    deviation /oc-qos:qos/oc-qos:scheduler-policies {
        deviate not-supported;
    }

    deviation /oc-qos:qos/oc-qos:buffer-allocation-profiles {
        deviate not-supported;
    }

    deviation /oc-qos:qos/oc-qos:queue-management-profiles {
        deviate not-supported;
    }
}

```

## System Module Support

The Extreme 9920 software with the NPB application supports `openconfig-system.yang`, v0.5.0, with the following deviations.

```

module extreme-openconfig-system-deviations {

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

    prefix "extr-oc-sys-dev";

    import openconfig-system { prefix "oc-sys"; }

    organization "Extreme Networks, Inc.";

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

    description
        "This module describes the deviations from openconfig-system v0.5.0";

    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:console {
    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:admin-user {
    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{
        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:servers/oc-sys:server/oc-sys:state/oc-
sys:stratum{
        deviate not-supported;
    }
    deviation /oc-sys:system/oc-sys:ntp/oc-sys:servers/oc-sys:server/oc-sys:state/oc-
sys:root-delay{
        deviate not-supported;
    }
    deviation /oc-sys:system/oc-sys:ntp/oc-sys:servers/oc-sys:server/oc-sys:state/oc-
sys:root-dispersion{
        deviate not-supported;
    }
    deviation /oc-sys:system/oc-sys:ntp/oc-sys:servers/oc-sys:server/oc-sys:state/oc-
sys:offset{
        deviate not-supported;
    }
    deviation /oc-sys:system/oc-sys:ntp/oc-sys:servers/oc-sys:server/oc-sys:state/oc-
sys:poll-interval{
        deviate not-supported;
    }
}
```





# Extreme YANG Tree

The Extreme YANG tree describes the module attributes that are supported by the Extreme 9920 software with the NPB application.

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

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

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```

+--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

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```

        +--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 pcpc?               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 pcpc?               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

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```

    +--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
+--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

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
      | +--rw 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 sfilepath-id?   uint16
| | | +--rw sfilepath-index?   uint8
| +--ro state
|   +--ro port-names* [port-name]
|   | +--ro port-name   string
|   +--ro port-ids* [port-id]
|   | +--ro port-id   uint16
|   +--ro sfilepath-id?   uint16
|   +--ro sfilepath-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
|   |   +--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 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

```