Extreme ONE OS Switching v22.2.1.0 YANG Reference Guide

OpenConfig Modules, Extensions, and Configuration Paths

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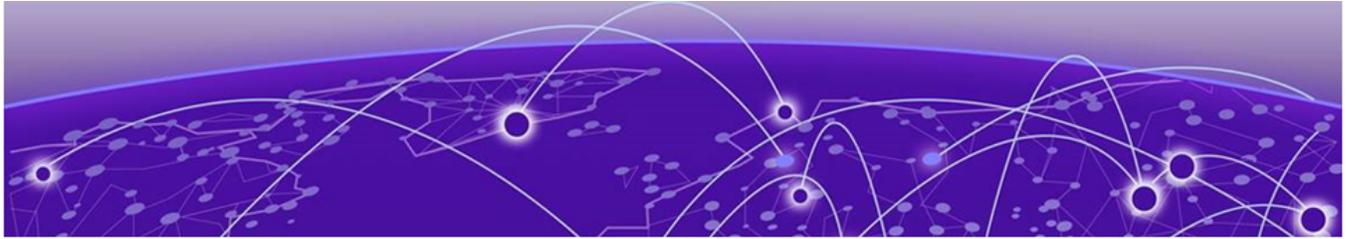# Legal Notices

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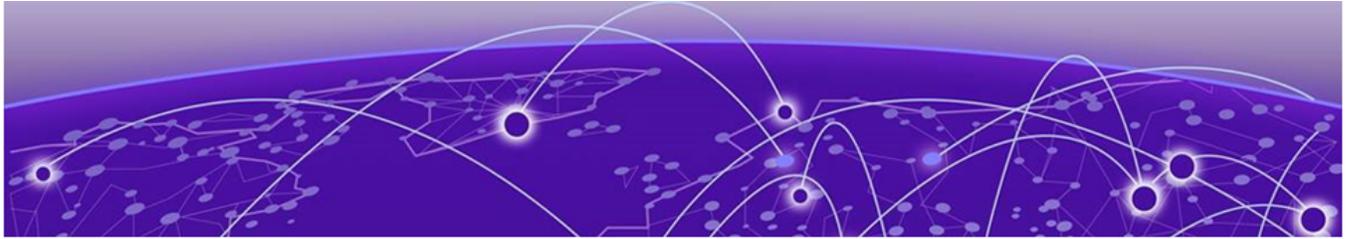
Abstract

The Extreme ONE OS Switching v22.2.1.0 YANG Reference Guide provides comprehensive technical specifications and implementation guidelines for YANG modules within the Extreme ONE OS Switching. It specifies the structure and behavior of OpenConfig-compliant modules and vendor-specific extensions used to manage network instances, interfaces, protocols, VLANs, static routes, transceivers, and system services. The guide includes detailed path hierarchies, configuration containers, and operational state nodes for elements such as VXLAN overlays, EVPN instances, BGP peer groups, L2VPN MAC learning, and tunnel encapsulation. It also documents telemetry counters for interface statistics, CPU and memory utilization, and optical metrics like laser bias current and chromatic dispersion. Advanced constructs include programming error tracking, route policy actions, and authentication mechanisms via AAA, RADIUS, TACACS+, and LDAP. System-level configurations cover SNMP, NTP, DNS, ZTP, SSH, GRUB, and CLI behavior. Designed for integration with NETCONF/RESTCONF-based management systems, the guide supports automation and validation workflows in SDN environments and assumes familiarity with YANG modeling and OpenConfig conventions.
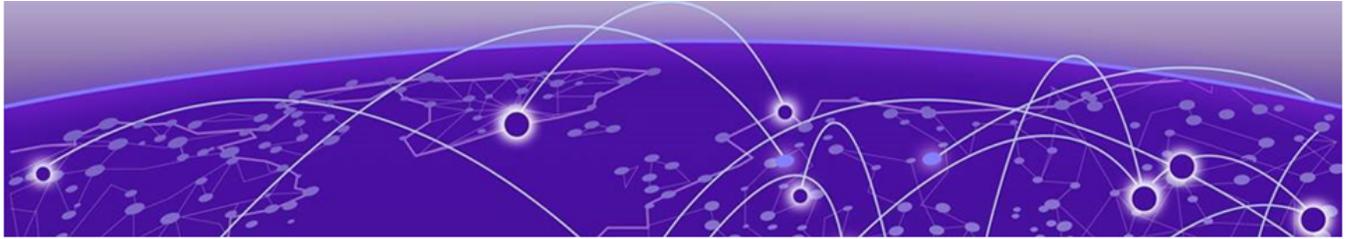
Preface

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

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.

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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 *enter* and *type*	When you see the word *enter* 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 *type*.
Key names	Key names are written in boldface, for example **Ctrl** or **Esc**. If you must press two or more keys simultaneously, the key names are linked with a plus sign (+). Example: Press **Ctrl**+**Alt**+**Del**
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.
NEW!	New information. In a PDF, this is searchable text.

Table 3: Command syntax

Convention	Description
bold text	Bold text indicates command names, keywords, and command options.
italic text	Italic text indicates variable content.
[ ]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{ **x** | **y** | **z** }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x | **y**	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, such as passwords, are enclosed in angle brackets.
…	Repeat the previous element, for example, `member[member...]`.
\	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.

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Current Product Documentation

Release Notes

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Extreme Optics Compatibility

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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.

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

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Provide as much detail as possible including the publication title, topic heading, and page number (if applicable), along with your comments and suggestions for improvement.
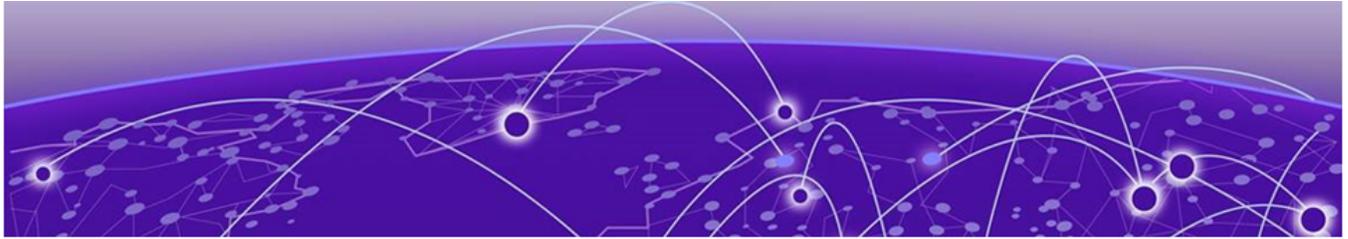
What's New in this Document

Extreme ONE OS Switching 22.2.1.0 supports Extreme 8520, Extreme 8720, Extreme 8730, and Extreme 8820 hardware platforms.

For more information about this release, see the *Extreme ONE OS Release Notes*.
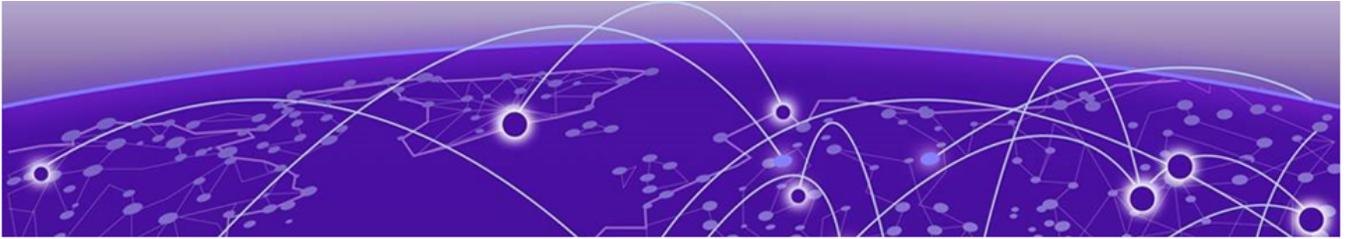
Overview

Extreme ONE OS Switching 22.2.1.0 supports Extreme 8520, Extreme 8720, Extreme 8730, and Extreme 8820 hardware platforms.

Extreme ONE OS leverages OpenConfig data models, extending them with augmentations and additional Extreme-specific YANG files that adhere to OpenConfig styling guidelines. The OS is divided into two primary components: Base OS and App.

Extreme ONE OS Base

Extreme ONE Base (Extreme ONE OS) is a standalone application that forms the base operating system for the supported hardware platforms. Extreme ONE Base is primarily for managing devices and does not provide networking protocols without the installation of additional applications such as Extreme ONE OS Switching.

Extreme ONE OS Switching

Extreme ONE OS Switching is an application that provides Switching and Routing functionality. Extreme ONE OS Switching extends the functionality of the base operating system (Extreme ONE OS) to adds configurable switching and routing protocols such as QoS, EVPN for VXLAN, BGP, and so on.
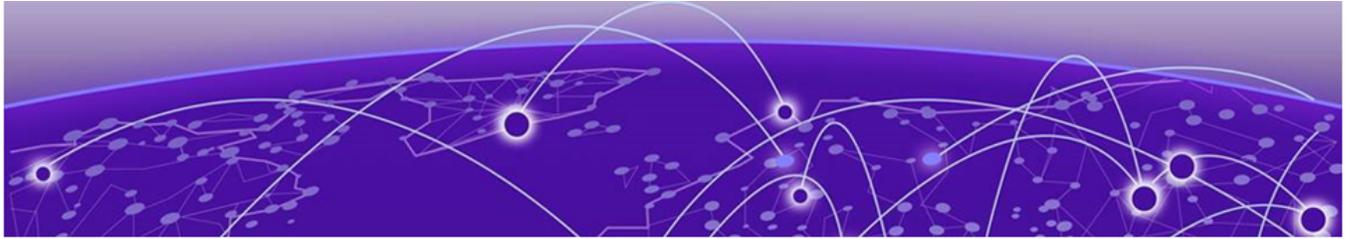
YANG Module - Extreme ONE OS Base

Extreme ONE OS Base supports the following OpenConfig YANG data modules for v5.3.0:

- module: opengconfig-network-instance
- module: opengconfig-interfaces
- module: opengconfig-lldp
- module: opengconfig-system
- module: opengconfig-keychain
- module: opengconfig-platform

```
module: opengconfig-network-instance
  +--rw network-instances
    +--rw network-instance* [name]
       +--rw name                                    -> ../config/name
       +--rw config
       |  +--rw name?                       string
       |  +--rw type                        identityref
       |  +--rw description?                string
       |  +--rw router-id?                  oc-yang:dotted-quad
       |  +--rw fallback-network-instance?  network-instance-ref
       |  +--rw extr-ni-ext:sub-type?       identityref
       |  +--rw extr-ni-ext:statistics?     boolean
       +--ro state
       |  +--ro name?                         string
       |  +--ro type                          identityref
       |  +--ro description?                  string
       |  +--ro router-id?                    oc-yang:dotted-quad
       |  +--ro fallback-network-instance?    network-instance-ref
       |  +--ro extr-ni-ext:network-instance-id?  uint32
       |  +--ro extr-ni-ext:sub-type?         identityref
       |  +--ro extr-ni-ext:statistics?       boolean
       |  +--ro extr-ni-ext:counters
       |     +--ro extr-ni-ext:in-octets?    oc-yang:counter64
       |     +--ro extr-ni-ext:in-pkts?      oc-yang:counter64
       |     +--ro extr-ni-ext:out-octets?   oc-yang:counter64
       |     +--ro extr-ni-ext:out-pkts?     oc-yang:counter64
       +--rw table-connections
       |  +--rw table-connection* [src-protocol dst-protocol address-family]
       |     +--rw src-protocol      -> ../config/src-protocol
       |     +--rw dst-protocol      -> ../config/dst-protocol
       |     +--rw address-family    -> ../config/address-family
       |     +--rw config
       |     |  +--rw src-protocol?              -> ../../../../tables/table/config/
protocol
       |     |  +--rw address-family?            -> ../../../../tables/
table[protocol=current()/../src-protocol]/config/address-family
       |     |  +--rw dst-protocol?              -> ../../../../tables/table/config/
protocol
       |     |  +--rw disable-metric-propagation?   boolean
       |     |  +--rw default-import-policy?        default-policy-type
```

```
       |       +--ro state
       |          +--ro src-protocol?                  -> ../../../../tables/table/config/
protocol
       |          +--ro address-family?               -> ../../../../tables/
table[protocol=current()/../src-protocol]/config/address-family
       |          +--ro dst-protocol?                  -> ../../../../tables/table/config/
protocol
       |          +--ro disable-metric-propagation?   boolean
       |          +--ro default-import-policy?        default-policy-type
       +--rw interfaces
       |  +--rw interface* [id]
       |     +--rw id        -> ../config/id
       |     +--rw config
       |     |  +--rw id?                        oc-if:interface-id
       |     |  +--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?                        oc-if:interface-id
       |        +--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 tables
       |  +--rw table* [protocol address-family]
       |     +--rw protocol          -> ../config/protocol
       |     +--rw address-family    -> ../config/address-family
       |     +--rw config
       |     |  +--rw protocol?        -> ../../../../protocols/protocol/config/
identifier
       |     |  +--rw address-family?   identityref
       |     +--ro state
       |        +--ro protocol?        -> ../../../../protocols/protocol/config/
identifier
       |        +--ro address-family?   identityref
       +--rw connection-points
       |  +--rw connection-point* [connection-point-id]
       |     +--rw connection-point-id    -> ../config/connection-point-id
       |     +--rw config
       |     |  +--rw connection-point-id?   string
       |     +--ro state
       |     |  +--ro connection-point-id?   string
       |     +--rw endpoints
       |        +--rw endpoint* [endpoint-id]
       |           +--rw endpoint-id    -> ../config/endpoint-id
       |           +--rw config
       |           |  +--rw endpoint-id?   string
       |           |  +--rw precedence?    uint16
       |           |  +--rw type?          identityref
       |           +--ro state
       |           |  +--ro endpoint-id?   string
       |           |  +--ro precedence?    uint16
       |           |  +--ro type?          identityref
       |           |  +--ro active?        boolean
       |           +--rw local
       |           |  +--rw config
       |           |  |  +--rw interface?                 -> /oc-if:interfaces/interface/
name
       |           |  |  +--rw subinterface?              -> /oc-if:interfaces/
```

```
interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/index
          |             |  |  +--rw site-id?                    uint16
          |             |  |  +--rw site-label-block-offset?    uint16
          |             |  |  +--rw site-label-block-size?      uint16
          |             |  +--ro state
          |             |     +--ro interface?                  -> /oc-if:interfaces/interface/
name
          |             |     +--ro subinterface?               -> /oc-if:interfaces/
interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/index
          |             |     +--ro site-id?                    uint16
          |             |     +--ro site-label-block-offset?    uint16
          |             |     +--ro site-label-block-size?      uint16
          |             +--rw remote
          |             |  +--rw config
          |             |  |  +--rw remote-system?               oc-inet:ip-address
          |             |  |  +--rw virtual-circuit-identifier?  uint32
          |             |  |  +--rw site-id?                     uint16
          |             |  +--ro state
          |             |     +--ro remote-system?               oc-inet:ip-address
          |             |     +--ro virtual-circuit-identifier?  uint32
          |             |     +--ro site-id?                     uint16
          |             +--rw vxlan
          |                +--rw config
          |                |  +--rw description?        string
          |                |  +--rw enabled?            boolean
          |                |  +--rw source-interface?   string
          |                +--ro state
          |                |  +--ro description?        string
          |                |  +--ro enabled?            boolean
          |                |  +--ro source-interface?   string
          |                +--ro endpoint-peers
          |                |  +--ro endpoint-peer* [peer-address]
          |                |     +--ro peer-address    -> ../state/peer-address
          |                |     +--ro state
          |                |        +--ro peer-address?         oc-inet:ip-address
          |                |        +--ro peer-state?           enumeration
          |                |        +--ro uptime?               oc-types:timeticks64
          |                |        x--ro control-plane-vnis*   oc-evpn-types:vni-id
          |                |        x--ro router-mac?           oc-yang:mac-address
          |                +--ro endpoint-vnis
          |                   +--ro endpoint-vni* [vni]
          |                      +--ro vni      -> ../state/vni
          |                      +--ro state
          |                         +--ro vni?                     oc-evpn-types:evi-id
          |                         +--ro vni-type?                enumeration
          |                         +--ro bridge-domain?           uint32
          |                         +--ro l3-vrf-name?             string
          |                         +--ro multidestination-traffic?   union
          |                         +--ro learning-mode?           oc-evpn-types:learning-
mode
          |                         +--ro vni-state?               enumeration
          |                         +--ro svi-state?               enumeration
          +--rw vlans
          |  +--rw vlan* [vlan-id]
          |     +--rw vlan-id    -> ../config/vlan-id
          |     +--rw config
          |     |  +--rw vlan-id?   oc-vlan-types:vlan-id
          |     |  +--rw name?      string
          |     |  +--rw status?    enumeration
          |     +--ro state
          |     |  +--ro vlan-id?   oc-vlan-types:vlan-id
          |     |  +--ro name?      string
          |     |  +--ro status?    enumeration
          |     +--rw members
```

```
|            +--ro member* []
|               +--ro state
|                  +--ro interface?   base-interface-ref
+--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
|     |  +--rw extr-ni-ext:default-distance?   uint32
|     +--ro state
|     |  +--ro identifier?                  identityref
|     |  +--ro name?                        string
|     |  +--ro enabled?                     boolean
|     |  +--ro default-metric?              uint32
|     |  +--ro extr-ni-ext:default-distance?   uint32
|     +--rw static-routes
|        +--rw static* [prefix]
|           +--rw prefix       -> ../config/prefix
|           +--rw config
|           |  +--rw prefix?        inet:ip-prefix
|           |  +--rw set-tag?       uint32
|           |  +--rw description?   string
|           +--ro state
|           |  +--ro prefix?        inet:ip-prefix
|           |  +--ro set-tag?       uint32
|           |  +--ro description?   string
|           +--rw next-hops
|              +--rw next-hop* [index]
|                 +--rw index               -> ../config/index
|                 +--rw config
|                 |  +--rw index?                        string
|                 |  +--rw next-hop?                      union
|                 |  +--rw recurse?                       boolean
|                 |  +--rw metric?                        uint32
|                 |  +--rw preference?                    uint32
|                 |  +--rw extr-ni-ext:admin-distance?    uint32
|                 +--ro state
|                 |  +--ro index?                        string
|                 |  +--ro next-hop?                      union
|                 |  +--ro recurse?                       boolean
|                 |  +--ro metric?                        uint32
|                 |  +--ro preference?                    uint32
|                 |  +--ro extr-ni-ext:admin-distance?    uint32
|                 +--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 oc-pgrmerrs:programming-errors
|  +--rw oc-pgrmerrs:ip-routes
|     +--rw oc-pgrmerrs:config
|     |  +--rw oc-pgrmerrs:enabled?   boolean
|     +--ro oc-pgrmerrs:state
|     |  +--ro oc-pgrmerrs:total-errors?   oc-yang:counter64
|     |  +--ro oc-pgrmerrs:enabled?        boolean
|     +--ro oc-pgrmerrs:failed-routes
```

```
        |       |  +--ro oc-pgrmerrs:failed* [prefix]
        |       |     +--ro oc-pgrmerrs:prefix    -> ../state/prefix
        |       |     +--ro oc-pgrmerrs:state
        |       |        +--ro oc-pgrmerrs:prefix?          oc-inet:ip-prefix
        |       |        +--ro oc-pgrmerrs:time?            oc-types:timeticks64
        |       |        +--ro oc-pgrmerrs:dest-component*  -> /oc-platform:components/
component/name
        |       +--ro oc-pgrmerrs:stale-routes
        |       |  +--ro oc-pgrmerrs:stale* [prefix]
        |       |     +--ro oc-pgrmerrs:prefix    -> ../state/prefix
        |       |     +--ro oc-pgrmerrs:state
        |       |        +--ro oc-pgrmerrs:prefix?          oc-inet:ip-prefix
        |       |        +--ro oc-pgrmerrs:time?            oc-types:timeticks64
        |       |        +--ro oc-pgrmerrs:dest-component*  -> /oc-platform:components/
component/name
        |       +--ro oc-pgrmerrs:drop-routes
        |          +--ro oc-pgrmerrs:drop* [prefix]
        |             +--ro oc-pgrmerrs:prefix    -> ../state/prefix
        |             +--ro oc-pgrmerrs:state
        |                +--ro oc-pgrmerrs:prefix?          oc-inet:ip-prefix
        |                +--ro oc-pgrmerrs:time?            oc-types:timeticks64
        |                +--ro oc-pgrmerrs:dest-component*  -> /oc-platform:components/
component/name
        +--ro extr-ni-tables-network-ext:tables-network
        |  +--ro extr-ni-tables-network-ext:ipv4-unicast
        |  |  +--ro extr-ni-tables-network-ext:ipv4-entry* [prefix-len prefix]
        |  |     +--ro extr-ni-tables-network-ext:prefix-len    -> ../state/prefix-len
        |  |     +--ro extr-ni-tables-network-ext:prefix        -> ../state/prefix
        |  |     +--ro extr-ni-tables-network-ext:state
        |  |        +--ro extr-ni-tables-network-ext:prefix-len?           uint8
        |  |        +--ro extr-ni-tables-network-ext:prefix?               oc-inet:ipv4-
prefix
        |  |        +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        |  |        |  +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        |  |        |  +--ro extr-ni-tables-network-ext:state
        |  |        |     +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        |  |        |     +--ro extr-ni-tables-network-ext:type?              identityref
        |  |        |     +--ro extr-ni-tables-network-ext:tag?               uint32
        |  |        |     +--ro extr-ni-tables-network-ext:admin-distance?    uint8
        |  |        |     +--ro extr-ni-tables-network-ext:metric?            uint32
        |  |        |     +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        |  |        |     +--ro extr-ni-tables-network-ext:next-hop-group?
-> ../../../../../../next-hop-groups/next-hop-group/state/id
        |  |        +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        |  |        +--ro extr-ni-tables-network-ext:hardware-status?        identityref
        |  +--ro extr-ni-tables-network-ext:ipv6-unicast
        |  |  +--ro extr-ni-tables-network-ext:ipv6-entry* [prefix-len prefix]
        |  |     +--ro extr-ni-tables-network-ext:prefix-len    -> ../state/prefix-len
        |  |     +--ro extr-ni-tables-network-ext:prefix        -> ../state/prefix
        |  |     +--ro extr-ni-tables-network-ext:state
        |  |        +--ro extr-ni-tables-network-ext:prefix-len?           uint8
        |  |        +--ro extr-ni-tables-network-ext:prefix?               oc-inet:ipv6-
prefix
        |  |        +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        |  |        |  +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        |  |        |  +--ro extr-ni-tables-network-ext:state
        |  |        |     +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        |  |        |     +--ro extr-ni-tables-network-ext:type?              identityref
        |  |        |     +--ro extr-ni-tables-network-ext:tag?               uint32
        |  |        |     +--ro extr-ni-tables-network-ext:admin-distance?    uint8
        |  |        |     +--ro extr-ni-tables-network-ext:metric?            uint32
```

```
        |  |          |        +--ro extr-ni-tables-network-ext:last-updated?        oc-
types:timeticks64
        |  |          |        +--ro extr-ni-tables-network-ext:next-hop-group?
-> ../../../../../../next-hop-groups/next-hop-group/state/id
        |  |          +--ro extr-ni-tables-network-ext:best-origin-protocol?    identityref
        |  |          +--ro extr-ni-tables-network-ext:hardware-status?        identityref
        |  +--ro extr-ni-tables-network-ext:ethernet
        |  |  +--ro extr-ni-tables-network-ext:mac-entry* [mac-address]
        |  |     +--ro extr-ni-tables-network-ext:mac-address    -> ../state/mac-address
        |  |     +--ro extr-ni-tables-network-ext:state
        |  |        +--ro extr-ni-tables-network-ext:mac-address?           oc-yang:mac-
address
        |  |        +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        |  |        |  +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        |  |        |  +--ro extr-ni-tables-network-ext:state
        |  |        |     +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        |  |        |     +--ro extr-ni-tables-network-ext:type?              identityref
        |  |        |     +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        |  |        |     +--ro extr-ni-tables-network-ext:seq-no?            uint32
        |  |        |     +--ro extr-ni-tables-network-ext:next-hop-group?
-> ../../../../../../next-hop-groups/next-hop-group/state/id
        |  |        +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        |  |        +--ro extr-ni-tables-network-ext:hardware-status?        identityref
        |  +--ro extr-ni-tables-network-ext:ipv4-neighbor
        |  |  +--ro extr-ni-tables-network-ext:ipv4-nbr-entry* [nbr-address]
        |  |     +--ro extr-ni-tables-network-ext:nbr-address    -> ../state/nbr-address
        |  |     +--ro extr-ni-tables-network-ext:state
        |  |        +--ro extr-ni-tables-network-ext:nbr-address?            oc-inet:ipv4-
prefix
        |  |        +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        |  |        |  +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        |  |        |  +--ro extr-ni-tables-network-ext:state
        |  |        |     +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        |  |        |     +--ro extr-ni-tables-network-ext:type?              identityref
        |  |        |     +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        |  |        |     +--ro extr-ni-tables-network-ext:seq-no?            uint32
        |  |        |     +--ro extr-ni-tables-network-ext:mac-address?        oc-yang:mac-
address
        |  |        |     +--ro extr-ni-tables-network-ext:interface-ref
        |  |        |        +--ro extr-ni-tables-network-ext:interface?       -> /oc-
if:interfaces/interface/name
        |  |        |        +--ro extr-ni-tables-network-ext:subinterface?   -> /oc-
if:interfaces/interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/
index
        |  |        |        +--ro extr-ni-tables-network-ext:l3-interface?   -> /oc-
if:interfaces/interface/name
        |  |        +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        |  |        +--ro extr-ni-tables-network-ext:hardware-status?        identityref
        |  +--ro extr-ni-tables-network-ext:ipv6-neighbor
        |  |  +--ro extr-ni-tables-network-ext:ipv6-nbr-entry* [nbr-address]
        |  |     +--ro extr-ni-tables-network-ext:nbr-address    -> ../state/nbr-address
        |  |     +--ro extr-ni-tables-network-ext:state
        |  |        +--ro extr-ni-tables-network-ext:nbr-address?            oc-inet:ipv6-
prefix
        |  |        +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        |  |        |  +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        |  |        |  +--ro extr-ni-tables-network-ext:state
        |  |        |     +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        |  |        |     +--ro extr-ni-tables-network-ext:type?              identityref
```

```
        |  |         |       +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        |  |         |       +--ro extr-ni-tables-network-ext:seq-no?            uint32
        |  |         |       +--ro extr-ni-tables-network-ext:mac-address?        oc-yang:mac-
address
        |  |         |       +--ro extr-ni-tables-network-ext:interface-ref
        |  |         |          +--ro extr-ni-tables-network-ext:interface?      -> /oc-
if:interfaces/interface/name
        |  |         |          +--ro extr-ni-tables-network-ext:subinterface?   -> /oc-
if:interfaces/interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/
index
        |  |         |          +--ro extr-ni-tables-network-ext:l3-interface?   -> /oc-
if:interfaces/interface/name
        |  |         +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        |  |         +--ro extr-ni-tables-network-ext:hardware-status?        identityref
        |  +--ro extr-ni-tables-network-ext:next-hop-groups
        |  |  +--ro extr-ni-tables-network-ext:next-hop-group* [id]
        |  |     +--ro extr-ni-tables-network-ext:id       -> ../state/id
        |  |     +--ro extr-ni-tables-network-ext:state
        |  |        +--ro extr-ni-tables-network-ext:id?                   uint64
        |  |        +--ro extr-ni-tables-network-ext:next-hops*            -> ../../../../
next-hops/next-hop/state/index
        |  |        +--ro extr-ni-tables-network-ext:protocol-next-hops*   -> ../../../../
next-hops/next-hop/state/index
        |  +--ro extr-ni-tables-network-ext:next-hops
        |     +--ro extr-ni-tables-network-ext:next-hop* [index]
        |        +--ro extr-ni-tables-network-ext:index            -> ../state/index
        |        +--ro extr-ni-tables-network-ext:state
        |        |  +--ro extr-ni-tables-network-ext:index?                 uint64
        |        |  +--ro extr-ni-tables-network-ext:type?                  extr-ni-
types:next-hop-type
        |        |  +--ro extr-ni-tables-network-ext:network-instance-name?  string
        |        |  +--ro extr-ni-tables-network-ext:ip-address?            oc-inet:ip-
address
        |        |  +--ro extr-ni-tables-network-ext:mac-address?           oc-yang:mac-
address
        |        +--ro extr-ni-tables-network-ext:interface-ref
        |           +--ro extr-ni-tables-network-ext:interface?     -> /oc-if:interfaces/
interface/name
        |           +--ro extr-ni-tables-network-ext:subinterface?  -> /oc-if:interfaces/
interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/index
        |           +--ro extr-ni-tables-network-ext:l3-interface?  -> /oc-if:interfaces/
interface/name
        +--rw extr-ni-ext:vni-domains
           +--rw extr-ni-ext:vni-domain* [name]
              +--rw extr-ni-ext:name      -> ../config/name
              +--rw extr-ni-ext:config
              |  +--rw extr-ni-ext:name?   string
              |  +--rw extr-ni-ext:vni?    uint32
              +--ro extr-ni-ext:state
                 +--ro extr-ni-ext:name?   string
                 +--ro extr-ni-ext:vni?    uint32

module: openconfig-interfaces
  +--rw interfaces
     +--rw interface* [name]
        +--rw name                      -> ../config/name
        +--rw config
        |  +--rw name?                     string
        |  +--rw type                      identityref
        |  +--rw mtu?                       uint16
        |  +--rw loopback-mode?             oc-opt-types:loopback-mode-type
        |  +--rw description?               string
        |  +--rw enabled?                   boolean
```

```
        |  +--rw oc-vlan:tpid?                    identityref
        |  +--rw oc-if-sdn:forwarding-viable?  boolean
        +--ro state
        |  +--ro name?                              string
        |  +--ro type                               identityref
        |  +--ro mtu?                                uint16
        |  +--ro loopback-mode?                      oc-opt-types:loopback-mode-type
        |  +--ro description?                        string
        |  +--ro enabled?                            boolean
        |  +--ro ifindex?                            uint32
        |  +--ro admin-status                        enumeration
        |  +--ro oper-status                         enumeration
        |  +--ro last-change?                        oc-types:timeticks64
        |  +--ro management?                         boolean
        |  +--ro cpu?                                boolean
        |  +--ro counters
        |  |  +--ro in-octets?                 oc-yang:counter64
        |  |  +--ro in-pkts?                   oc-yang:counter64
        |  |  +--ro in-unicast-pkts?           oc-yang:counter64
        |  |  +--ro in-broadcast-pkts?         oc-yang:counter64
        |  |  +--ro in-multicast-pkts?         oc-yang:counter64
        |  |  +--ro in-errors?                 oc-yang:counter64
        |  |  +--ro in-discards?               oc-yang:counter64
        |  |  +--ro out-octets?                oc-yang:counter64
        |  |  +--ro out-pkts?                  oc-yang:counter64
        |  |  +--ro out-unicast-pkts?          oc-yang:counter64
        |  |  +--ro out-broadcast-pkts?        oc-yang:counter64
        |  |  +--ro out-multicast-pkts?        oc-yang:counter64
        |  |  +--ro out-discards?              oc-yang:counter64
        |  |  +--ro out-errors?                oc-yang:counter64
        |  |  +--ro last-clear?                oc-types:timeticks64
        |  |  +--ro in-unknown-protos?         oc-yang:counter64
        |  |  +--ro in-fcs-errors?             oc-yang:counter64
        |  |  x--ro carrier-transitions?       oc-yang:counter64
        |  |  +--ro extr-if-ext:if-mib-counter
        |  |     +--ro extr-if-ext:if-counter-discontinuity-time?   string
        |  +--ro oc-vlan:tpid?                  identityref
        |  +--ro oc-if-sdn:forwarding-viable?       boolean
        |  +--ro oc-port:hardware-port?                 -> /oc-platform:components/component/
name
        |  +--ro oc-transceiver:transceiver?          -> /oc-platform:components/
component[oc-platform:name=current()/../oc-port:hardware-port]/oc-platform:subcomponents/
subcomponent/name
        |  +--ro oc-transceiver:physical-channel*   -> /oc-platform:components/
component[oc-platform:name=current()/../oc-transceiver:transceiver]/transceiver/physical-
channels/channel/index
        |  +--ro extr-if-ext:if-mib
        |  |  +--ro extr-if-ext:if-last-change?   string
        |  +--ro extr-if-ext:oper-down-reason?      identityref
        |  +--ro extr-if-ext:max-supported-speed*   identityref
        +--rw subinterfaces
        |  +--rw subinterface* [index]
        |     +--rw index            -> ../config/index
        |     +--rw config
        |     |  +--rw index?              uint32
        |     |  +--rw description?        string
        |     |  +--rw enabled?            boolean
        |     |  +--rw extr-if-ext:if-mode?  identityref
        |     +--ro state
        |     |  +--ro index?                  uint32
        |     |  +--ro description?            string
        |     |  +--ro enabled?                boolean
        |     |  +--ro name?                   string
        |     |  +--ro ifindex?                uint32
```

```
|      |  +--ro admin-status                      enumeration
|      |  +--ro oper-status                       enumeration
|      |  +--ro last-change?                      oc-types:timeticks64
|      |  +--ro logical?                          boolean
|      |  +--ro management?                       boolean
|      |  +--ro cpu?                              boolean
|      |  +--ro counters
|      |  |  +--ro in-octets?             oc-yang:counter64
|      |  |  +--ro in-pkts?               oc-yang:counter64
|      |  |  +--ro in-unicast-pkts?       oc-yang:counter64
|      |  |  +--ro in-broadcast-pkts?     oc-yang:counter64
|      |  |  +--ro in-multicast-pkts?     oc-yang:counter64
|      |  |  +--ro in-errors?             oc-yang:counter64
|      |  |  +--ro in-discards?           oc-yang:counter64
|      |  |  +--ro out-octets?            oc-yang:counter64
|      |  |  +--ro out-pkts?              oc-yang:counter64
|      |  |  +--ro out-unicast-pkts?      oc-yang:counter64
|      |  |  +--ro out-broadcast-pkts?    oc-yang:counter64
|      |  |  +--ro out-multicast-pkts?    oc-yang:counter64
|      |  |  +--ro out-discards?          oc-yang:counter64
|      |  |  +--ro out-errors?            oc-yang:counter64
|      |  |  +--ro last-clear?            oc-types:timeticks64
|      |  |  x--ro in-unknown-protos?     oc-yang:counter64
|      |  |  x--ro in-fcs-errors?         oc-yang:counter64
|      |  |  x--ro carrier-transitions?   oc-yang:counter64
|      |  +--ro extr-if-ext:oper-down-reason?   identityref
|      |  +--ro extr-if-ext:if-mode?            identityref
|      +--rw oc-vlan:vlan
|      |  +--rw oc-vlan:config
|      |  |  x--rw oc-vlan:vlan-id?   union
|      |  +--ro oc-vlan:state
|      |  |  x--ro oc-vlan:vlan-id?   union
|      |  +--rw oc-vlan:match
|      |  |  +--rw oc-vlan:single-tagged
|      |  |  |  +--rw oc-vlan:config
|      |  |  |  |  +--rw oc-vlan:vlan-id?   oc-vlan-types:vlan-id
|      |  |  |  +--ro oc-vlan:state
|      |  |  |     +--ro oc-vlan:vlan-id?   oc-vlan-types:vlan-id
|      |  |  +--rw oc-vlan:single-tagged-list
|      |  |  |  +--rw oc-vlan:config
|      |  |  |  |  +--rw oc-vlan:vlan-ids*   oc-vlan-types:vlan-id
|      |  |  |  +--ro oc-vlan:state
|      |  |  |     +--ro oc-vlan:vlan-ids*   oc-vlan-types:vlan-id
|      |  |  +--rw oc-vlan:single-tagged-range
|      |  |  |  +--rw oc-vlan:config
|      |  |  |  |  +--rw oc-vlan:low-vlan-id?    oc-vlan-types:vlan-id
|      |  |  |  |  +--rw oc-vlan:high-vlan-id?   oc-vlan-types:vlan-id
|      |  |  |  +--ro oc-vlan:state
|      |  |  |     +--ro oc-vlan:low-vlan-id?    oc-vlan-types:vlan-id
|      |  |  |     +--ro oc-vlan:high-vlan-id?   oc-vlan-types:vlan-id
|      |  |  +--rw oc-vlan:double-tagged
|      |  |  |  +--rw oc-vlan:config
|      |  |  |  |  +--rw oc-vlan:inner-vlan-id?   oc-vlan-types:vlan-id
|      |  |  |  |  +--rw oc-vlan:outer-vlan-id?   oc-vlan-types:vlan-id
|      |  |  |  +--ro oc-vlan:state
|      |  |  |     +--ro oc-vlan:inner-vlan-id?   oc-vlan-types:vlan-id
|      |  |  |     +--ro oc-vlan:outer-vlan-id?   oc-vlan-types:vlan-id
|      |  |  +--rw oc-vlan:double-tagged-inner-list
|      |  |  |  +--rw oc-vlan:config
|      |  |  |  |  +--rw oc-vlan:inner-vlan-ids*   oc-vlan-types:vlan-id
|      |  |  |  |  +--rw oc-vlan:outer-vlan-id?    oc-vlan-types:vlan-id
|      |  |  |  +--ro oc-vlan:state
|      |  |  |     +--ro oc-vlan:inner-vlan-ids*   oc-vlan-types:vlan-id
|      |  |  |     +--ro oc-vlan:outer-vlan-id?    oc-vlan-types:vlan-id
```

```
|     |   |   +--rw oc-vlan:double-tagged-outer-list
|     |   |   | +--rw oc-vlan:config
|     |   |   | | +--rw oc-vlan:inner-vlan-id?    oc-vlan-types:vlan-id
|     |   |   | | +--rw oc-vlan:outer-vlan-ids*   oc-vlan-types:vlan-id
|     |   |   | +--ro oc-vlan:state
|     |   |   |   +--ro oc-vlan:inner-vlan-id?    oc-vlan-types:vlan-id
|     |   |   |   +--ro oc-vlan:outer-vlan-ids*   oc-vlan-types:vlan-id
|     |   +--rw oc-vlan:double-tagged-inner-range
|     |   | +--rw oc-vlan:config
|     |   | | +--rw oc-vlan:inner-low-vlan-id?    oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:inner-high-vlan-id?   oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:outer-vlan-id*        oc-vlan-types:vlan-id
|     |   | +--ro oc-vlan:state
|     |   |   +--ro oc-vlan:inner-low-vlan-id?    oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:inner-high-vlan-id?   oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:outer-vlan-id*        oc-vlan-types:vlan-id
|     |   +--rw oc-vlan:double-tagged-outer-range
|     |   | +--rw oc-vlan:config
|     |   | | +--rw oc-vlan:inner-vlan-id?        oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:outer-low-vlan-id?    oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:outer-high-vlan-id?   oc-vlan-types:vlan-id
|     |   | +--ro oc-vlan:state
|     |   |   +--ro oc-vlan:inner-vlan-id?        oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:outer-low-vlan-id?    oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:outer-high-vlan-id?   oc-vlan-types:vlan-id
|     |   +--rw oc-vlan:double-tagged-inner-outer-range
|     |   | +--rw oc-vlan:config
|     |   | | +--rw oc-vlan:inner-low-vlan-id?    oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:inner-high-vlan-id?   oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:outer-low-vlan-id?    oc-vlan-types:vlan-id
|     |   | | +--rw oc-vlan:outer-high-vlan-id?   oc-vlan-types:vlan-id
|     |   | +--ro oc-vlan:state
|     |   |   +--ro oc-vlan:inner-low-vlan-id?    oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:inner-high-vlan-id?   oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:outer-low-vlan-id?    oc-vlan-types:vlan-id
|     |   |   +--ro oc-vlan:outer-high-vlan-id?   oc-vlan-types:vlan-id
|     |   +--rw extr-vlan-ext:un-tagged
|     |      +--rw extr-vlan-ext:config
|     |      | +--rw extr-vlan-ext:vlan-id?       oc-vlan-types:vlan-id
|     |      | +--rw extr-vlan-ext:accept-mode?   identityref
|     |      +--ro extr-vlan-ext:state
|     |         +--ro extr-vlan-ext:vlan-id?       oc-vlan-types:vlan-id
|     |         +--ro extr-vlan-ext:accept-mode?   identityref
|   +--rw oc-vlan:ingress-mapping
|   | +--rw oc-vlan:config
|   | | +--rw oc-vlan:vlan-stack-action?   oc-vlan-types:vlan-stack-action
|   | | +--rw oc-vlan:vlan-id?             oc-vlan-types:vlan-id
|   | | +--rw oc-vlan:tpid?                identityref
|   | +--ro oc-vlan:state
|   |   +--ro oc-vlan:vlan-stack-action?   oc-vlan-types:vlan-stack-action
|   |   +--ro oc-vlan:vlan-id?             oc-vlan-types:vlan-id
|   |   +--ro oc-vlan:tpid?                identityref
|   +--rw oc-vlan:egress-mapping
|      +--rw oc-vlan:config
|      | +--rw oc-vlan:vlan-stack-action?   oc-vlan-types:vlan-stack-action
|      | +--rw oc-vlan:vlan-id?             oc-vlan-types:vlan-id
|      | +--rw oc-vlan:tpid?                identityref
|      +--ro oc-vlan:state
|         +--ro oc-vlan:vlan-stack-action?   oc-vlan-types:vlan-stack-action
|         +--ro oc-vlan:vlan-id?             oc-vlan-types:vlan-id
|         +--ro oc-vlan:tpid?                identityref
+--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
|     |   |       | +--rw extr-ip-ext:secondary?   boolean
|     |   |       +--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
|     |   |          +--ro extr-ip-ext:secondary?   boolean
|     |   |          +--ro extr-ip-ext:status?      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:config
|     |   | +--rw oc-ip:enabled?                        boolean
|     |   | +--rw oc-ip:mtu?                            uint16
|     |   | +--rw oc-ip:dhcp-client?                    boolean
|     |   | +--rw extr-ip-ext:neighbor-reachabletime?   uint16
|     |   +--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
|     |      +--ro extr-ip-ext:neighbor-reachabletime?   uint16
|     +--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
|        |    | +--rw extr-ip-ext:secondary?   boolean
|        |    | +--rw extr-ip-ext:eui-64?      boolean
|        |    +--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
|        |       +--ro extr-ip-ext:secondary?   boolean
|        |       +--ro extr-ip-ext:eui-64?      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: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
|        |  +--rw extr-ip-ext:neighbor-reachabletime?    uint16
|        +--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
|        |  +--ro extr-ip-ext:neighbor-reachabletime?    uint16
|        +--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
+--rw oc-eth:ethernet
|  +--rw oc-eth:config
|  |  +--rw oc-eth:mac-address?                      oc-yang:mac-address
|  |  +--rw oc-eth:enable-flow-control?              boolean
|  |  +--rw oc-eth:auto-negotiate?                   boolean
|  |  +--rw oc-eth:standalone-link-training?         boolean
|  |  +--rw oc-eth:duplex-mode?                      enumeration
|  |  +--rw oc-eth:port-speed?                       identityref
|  |  +--rw oc-eth:fec-mode?                         identityref
|  |  +--rw oc-lag:aggregate-id?                     -> /oc-if:interfaces/
interface/name
|  |  +--rw extr-eth-ext:fec
|  |  |  +--rw extr-eth-ext:fec-mode?   fec-mode-type
|  |  +--rw extr-eth-ext:link-fault-signaling?       boolean
|  |  +--rw extr-eth-ext:interfaces-auto?            boolean
|  |  +--rw extr-eth-ext:interfaces-auto-negotiation?  boolean
|  |  +--rw extr-eth-ext:interfaces-loopback-mode?   boolean
|  +--ro oc-eth:state
|  |  +--ro oc-eth:mac-address?                         oc-yang:mac-address
|  |  +--ro oc-eth:enable-flow-control?              boolean
```

```
|  |  +--ro oc-eth:auto-negotiate?                        boolean
|  |  +--ro oc-eth:standalone-link-training?              boolean
|  |  +--ro oc-eth:duplex-mode?                           enumeration
|  |  +--ro oc-eth:port-speed?                            identityref
|  |  +--ro oc-eth:fec-mode?                              identityref
|  |  +--ro oc-eth:hw-mac-address?                        oc-yang:mac-address
|  |  +--ro oc-eth:negotiated-duplex-mode?                enumeration
|  |  +--ro oc-eth:negotiated-port-speed?                 identityref
|  |  +--ro oc-eth:counters
|  |  |  +--ro oc-eth:in-mac-control-frames?       oc-yang:counter64
|  |  |  +--ro oc-eth:in-mac-pause-frames?         oc-yang:counter64
|  |  |  +--ro oc-eth:in-oversize-frames?          oc-yang:counter64
|  |  |  +--ro oc-eth:in-undersize-frames?         oc-yang:counter64
|  |  |  +--ro oc-eth:in-jabber-frames?            oc-yang:counter64
|  |  |  +--ro oc-eth:in-fragment-frames?          oc-yang:counter64
|  |  |  +--ro oc-eth:in-8021q-frames?             oc-yang:counter64
|  |  |  +--ro oc-eth:in-crc-errors?               oc-yang:counter64
|  |  |  +--ro oc-eth:in-block-errors?             oc-yang:counter64
|  |  |  +--ro oc-eth:in-carrier-errors?           oc-yang:counter64
|  |  |  +--ro oc-eth:in-interrupted-tx?           oc-yang:counter64
|  |  |  +--ro oc-eth:in-late-collision?           oc-yang:counter64
|  |  |  +--ro oc-eth:in-mac-errors-rx?            oc-yang:counter64
|  |  |  +--ro oc-eth:in-single-collision?         oc-yang:counter64
|  |  |  +--ro oc-eth:in-symbol-error?             oc-yang:counter64
|  |  |  +--ro oc-eth:in-maxsize-exceeded?         oc-yang:counter64
|  |  |  +--ro oc-eth:out-mac-control-frames?      oc-yang:counter64
|  |  |  +--ro oc-eth:out-mac-pause-frames?        oc-yang:counter64
|  |  |  +--ro oc-eth:out-8021q-frames?            oc-yang:counter64
|  |  |  +--ro oc-eth:out-mac-errors-tx?           oc-yang:counter64
|  |  |  +--ro oc-eth-ext:in-distribution
|  |  |  |  +--ro oc-eth-ext:in-frames-64-octets?         oc-yang:counter64
|  |  |  |  +--ro oc-eth-ext:in-frames-65-127-octets?     oc-yang:counter64
|  |  |  |  +--ro oc-eth-ext:in-frames-128-255-octets?    oc-yang:counter64
|  |  |  |  +--ro oc-eth-ext:in-frames-256-511-octets?    oc-yang:counter64
|  |  |  |  +--ro oc-eth-ext:in-frames-512-1023-octets?   oc-yang:counter64
|  |  |  |  +--ro oc-eth-ext:in-frames-1024-1518-octets?  oc-yang:counter64
|  |  |  +--ro extr-eth-ext:bandwidth-utilization
|  |  |  |  +--ro extr-eth-ext:in-pkts-per-sec?           uint64
|  |  |  |  +--ro extr-eth-ext:out-pkts-per-sec?          uint64
|  |  |  |  +--ro extr-eth-ext:in-bits-per-sec?           uint64
|  |  |  |  +--ro extr-eth-ext:out-bits-per-sec?          uint64
|  |  |  |  +--ro extr-eth-ext:in-bandwidth-percentage?   oc-types:percentage
|  |  |  |  +--ro extr-eth-ext:out-bandwidth-percentage?  oc-types:percentage
|  |  |  +--ro extr-eth-ext:eth-fec-counters
|  |  |  |  +--ro extr-eth-ext:fec-uncorrected-pkts?   oc-yang:counter64
|  |  |  |  +--ro extr-eth-ext:fec-corrected-pkts?     oc-yang:counter64
|  |  |  +--ro extr-eth-ext:in-overrun-frames?      oc-yang:counter64
|  |  |  +--ro extr-eth-ext:out-carrier-errors-tx?  oc-yang:counter64
|  |  |  +--ro extr-eth-ext:out-collisions-tx?      oc-yang:counter64
|  |  +--ro oc-lag:aggregate-id?                          -> /oc-if:interfaces/
interface/name
|  |  +--ro extr-eth-ext:ethernet-link-dampening-status
|  |  |  +--ro extr-eth-ext:link-dampening-status?  uint32
|  |  |  +--ro extr-eth-ext:last-updated?           oc-types:timeticks64
|  |  +--ro extr-eth-ext:fec
|  |  |  +--ro extr-eth-ext:fec-mode?    fec-mode-type
|  |  +--ro extr-eth-ext:link-fault-signaling?             boolean
|  |  +--ro extr-eth-ext:link-fault-status?                string
|  |  +--ro extr-eth-ext:local-fault-count?                uint64
|  |  +--ro extr-eth-ext:remote-fault-count?               uint64
|  |  +--ro extr-eth-ext:last-local-fault?                 oc-types:timeticks64
|  |  +--ro extr-eth-ext:last-remote-fault?                oc-types:timeticks64
|  |  +--ro extr-eth-ext:interfaces-auto?                  boolean
|  |  +--ro extr-eth-ext:interfaces-auto-negotiation?      boolean
```

```
|  |  +--ro extr-eth-ext:interfaces-loopback-mode?         boolean
| +--rw oc-poe:poe
|  | +--rw oc-poe:config
|  |  | +--rw oc-poe:enabled?   boolean
|  | +--ro oc-poe:state
|  |    +--ro oc-poe:enabled?       boolean
|  |    +--ro oc-poe:power-used?    decimal64
|  |    +--ro oc-poe:power-class?   uint8
| +--rw oc-1x:dot1x
|  | +--rw oc-1x:config
|  |  | +--rw oc-1x:authenticate-port?         boolean
|  |  | +--rw oc-1x:host-mode?                 enumeration
|  |  | +--rw oc-1x:reauthenticate-interval?   uint16
|  |  | +--rw oc-1x:retransmit-interval?       uint16
|  |  | +--rw oc-1x:supplicant-timeout?        uint16
|  |  | +--rw oc-1x:max-requests?              uint16
|  |  | +--rw oc-1x:server-fail-vlan?          union
|  |  | +--rw oc-1x:auth-fail-vlan?            union
|  | +--ro oc-1x:state
|  |    +--ro oc-1x:authenticate-port?         boolean
|  |    +--ro oc-1x:host-mode?                 enumeration
|  |    +--ro oc-1x:reauthenticate-interval?   uint16
|  |    +--ro oc-1x:retransmit-interval?       uint16
|  |    +--ro oc-1x:supplicant-timeout?        uint16
|  |    +--ro oc-1x:max-requests?              uint16
|  |    +--ro oc-1x:server-fail-vlan?          union
|  |    +--ro oc-1x:auth-fail-vlan?            union
| +--rw oc-1x:authenticated-sessions
|  | +--ro oc-1x:authenticated-session* [mac]
|  |    +--ro oc-1x:mac       -> ../state/mac
|  |    +--ro oc-1x:state
|  |       +--ro oc-1x:mac?         oc-yang:mac-address
|  |       +--ro oc-1x:session-id?   string
|  |       +--ro oc-1x:status?       enumeration
| +--rw extr-eth-ext:link-error-disable
|    +--rw extr-eth-ext:config
|    | +--rw extr-eth-ext:enabled?           boolean
|    | +--rw extr-eth-ext:toggle-threshold?   uint16
|    | +--rw extr-eth-ext:sampling-time?      uint32
|    | +--rw extr-eth-ext:wait-time?          uint32
|    +--ro extr-eth-ext:state
|       +--ro extr-eth-ext:enabled?           boolean
|       +--ro extr-eth-ext:toggle-threshold?   uint16
|       +--ro extr-eth-ext:sampling-time?      uint32
|       +--ro extr-eth-ext:wait-time?          uint32
|       +--ro extr-eth-ext:active-status?      uint16
|       +--ro extr-eth-ext:last-updated?       oc-types:timeticks64
+--rw oc-lag:aggregation
| +--rw oc-lag:config
| | +--rw oc-lag:lag-type?                     aggregation-type
| | +--rw oc-lag:min-links?                     uint16
| | +--rw extr-lag-ext:lag-load-balance-method?  aggregation-load-balance-
method
| | +--rw extr-lag-ext:port-speed?             identityref
| +--ro oc-lag:state
|    +--ro oc-lag:lag-type?                     aggregation-type
|    +--ro oc-lag:min-links?                     uint16
|    +--ro oc-lag:lag-speed?                     uint32
|    +--ro oc-lag:member*                        oc-if:base-interface-ref
|    +--ro extr-lag-ext:member-list*             oc-if:base-interface-ref
|    +--ro extr-lag-ext:active-member-list*      oc-if:base-interface-ref
|    +--ro extr-lag-ext:lag-load-balance-method?  aggregation-load-balance-
method
|    +--ro extr-lag-ext:port-speed?             identityref
```

```
+--rw oc-vlan:routed-vlan
|  +--rw oc-vlan:config
|  |  +--rw oc-vlan:vlan?   union
|  +--ro oc-vlan:state
|  |  +--ro oc-vlan: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
|  |  |     |  +--rw extr-ip-ext:secondary?       boolean
|  |  |     |  +--rw extr-ip-ext:anycast-gateway? boolean
|  |  |     +--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
|  |  |        +--ro extr-ip-ext:secondary?       boolean
|  |  |        +--ro extr-ip-ext:anycast-gateway? boolean
|  |  |        +--ro extr-ip-ext:status?          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:config
|  |  |  +--rw oc-ip:enabled?                      boolean
|  |  |  +--rw oc-ip:mtu?                          uint16
|  |  |  +--rw oc-ip:dhcp-client?                  boolean
|  |  |  +--rw extr-ip-ext:neighbor-reachabletime? uint16
|  |  +--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
|  |     +--ro extr-ip-ext:neighbor-reachabletime? uint16
|  +--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
|     |     |  +--rw extr-ip-ext:secondary?       boolean
|     |     |  +--rw extr-ip-ext:anycast-gateway? boolean
|     |     |  +--rw extr-ip-ext:eui-64?          boolean
```

```
|     |      +--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
|     |         +--ro extr-ip-ext:secondary?         boolean
|     |         +--ro extr-ip-ext:anycast-gateway?   boolean
|     |         +--ro extr-ip-ext:eui-64?            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: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
|     |  +--rw extr-ip-ext:neighbor-reachabletime?  uint16
|     +--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
|        +--ro extr-ip-ext:neighbor-reachabletime?  uint16
+--rw oc-tun:tunnel
|  +--rw oc-tun:config
|  |  +--rw oc-tun:src?   oc-inet:ip-address
|  |  +--rw oc-tun:dst?   oc-inet:ip-address
|  |  +--rw oc-tun:ttl?   uint8
|  +--ro oc-tun:state
|  |  +--ro oc-tun:src?   oc-inet:ip-address
|  |  +--ro oc-tun:dst?   oc-inet:ip-address
|  |  +--ro oc-tun:ttl?   uint8
|  +--rw oc-tun:ipv4
|  |  +--rw oc-tun:addresses
|  |  |  +--rw oc-tun:address* [ip]
|  |  |     +--rw oc-tun:ip          -> ../config/ip
|  |  |     +--rw oc-tun:config
|  |  |     |  +--rw oc-tun:ip?               oc-inet:ipv4-address
|  |  |     |  +--rw oc-tun:prefix-length?    uint8
|  |  |     +--ro oc-tun:state
|  |  |        +--ro oc-tun:ip?                oc-inet:ipv4-address
|  |  |        +--ro oc-tun:prefix-length?     uint8
```

```
|  |  |         +--ro oc-tun:origin?              ip-address-origin
|  |  |         +--ro extr-ip-ext:secondary?   boolean
|  |  |         +--ro extr-ip-ext:status?      enumeration
|  |  +--rw oc-tun:neighbors
|  |  |  +--rw oc-tun:neighbor* [ip]
|  |  |     +--rw oc-tun:ip         -> ../config/ip
|  |  |     +--rw oc-tun:config
|  |  |     |  +--rw oc-tun:ip?                  oc-inet:ipv4-address
|  |  |     |  +--rw oc-tun:link-layer-address   oc-yang:phys-address
|  |  |     +--ro oc-tun:state
|  |  |        +--ro oc-tun:ip?                  oc-inet:ipv4-address
|  |  |        +--ro oc-tun:link-layer-address   oc-yang:phys-address
|  |  |        +--ro oc-tun:origin?              neighbor-origin
|  |  +--rw oc-tun:config
|  |  |  +--rw oc-tun:enabled?       boolean
|  |  |  +--rw oc-tun:mtu?           uint16
|  |  |  +--rw oc-tun:dhcp-client?   boolean
|  |  +--ro oc-tun:state
|  |     +--ro oc-tun:enabled?       boolean
|  |     +--ro oc-tun:mtu?           uint16
|  |     +--ro oc-tun:dhcp-client?   boolean
|  |     +--ro oc-tun:counters
|  |        +--ro oc-tun:in-pkts?               oc-yang:counter64
|  |        +--ro oc-tun:in-octets?             oc-yang:counter64
|  |        +--ro oc-tun:in-error-pkts?         oc-yang:counter64
|  |        +--ro oc-tun:in-forwarded-pkts?     oc-yang:counter64
|  |        +--ro oc-tun:in-forwarded-octets?   oc-yang:counter64
|  |        +--ro oc-tun:in-discarded-pkts?     oc-yang:counter64
|  |        +--ro oc-tun:out-pkts?              oc-yang:counter64
|  |        +--ro oc-tun:out-octets?            oc-yang:counter64
|  |        +--ro oc-tun:out-error-pkts?        oc-yang:counter64
|  |        +--ro oc-tun:out-forwarded-pkts?    oc-yang:counter64
|  |        +--ro oc-tun:out-forwarded-octets?  oc-yang:counter64
|  |        +--ro oc-tun:out-discarded-pkts?    oc-yang:counter64
|  +--rw oc-tun:ipv6
|     +--rw oc-tun:addresses
|     |  +--rw oc-tun:address* [ip]
|     |     +--rw oc-tun:ip        -> ../config/ip
|     |     +--rw oc-tun:config
|     |     |  +--rw oc-tun:ip?              oc-inet:ipv6-address
|     |     |  +--rw oc-tun:prefix-length    uint8
|     |     +--ro oc-tun:state
|     |        +--ro oc-tun:ip?              oc-inet:ipv6-address
|     |        +--ro oc-tun:prefix-length    uint8
|     |        +--ro oc-tun:origin?          ip-address-origin
|     |        +--ro oc-tun:status?          enumeration
|     +--rw oc-tun:neighbors
|     |  +--rw oc-tun:neighbor* [ip]
|     |     +--rw oc-tun:ip        -> ../config/ip
|     |     +--rw oc-tun:config
|     |     |  +--rw oc-tun:ip?                  oc-inet:ipv6-address
|     |     |  +--rw oc-tun:link-layer-address   oc-yang:phys-address
|     |     +--ro oc-tun:state
|     |        +--ro oc-tun:ip?                  oc-inet:ipv6-address
|     |        +--ro oc-tun:link-layer-address   oc-yang:phys-address
|     |        +--ro oc-tun:origin?              neighbor-origin
|     |        +--ro oc-tun:is-router?           boolean
|     |        +--ro oc-tun:neighbor-state?      enumeration
|     +--rw oc-tun:config
|     |  +--rw oc-tun:enabled?                  boolean
|     |  +--rw oc-tun:mtu?                      uint32
|     |  +--rw oc-tun:dup-addr-detect-transmits?   uint32
|     |  +--rw oc-tun:dhcp-client?              boolean
|     +--ro oc-tun:state
```

```
    |            +--ro oc-tun:enabled?                    boolean
    |            +--ro oc-tun:mtu?                        uint32
    |            +--ro oc-tun:dup-addr-detect-transmits?  uint32
    |            +--ro oc-tun:dhcp-client?                boolean
    |            +--ro oc-tun:counters
    |               +--ro oc-tun:in-pkts?              oc-yang:counter64
    |               +--ro oc-tun:in-octets?            oc-yang:counter64
    |               +--ro oc-tun:in-error-pkts?        oc-yang:counter64
    |               +--ro oc-tun:in-forwarded-pkts?    oc-yang:counter64
    |               +--ro oc-tun:in-forwarded-octets?  oc-yang:counter64
    |               +--ro oc-tun:in-discarded-pkts?    oc-yang:counter64
    |               +--ro oc-tun:out-pkts?             oc-yang:counter64
    |               +--ro oc-tun:out-octets?           oc-yang:counter64
    |               +--ro oc-tun:out-error-pkts?       oc-yang:counter64
    |               +--ro oc-tun:out-forwarded-pkts?   oc-yang:counter64
    |               +--ro oc-tun:out-forwarded-octets? oc-yang:counter64
    |               +--ro oc-tun:out-discarded-pkts?   oc-yang:counter64
    +--rw oc-line-com:sonet

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
    | +--rw extr-lldp-ext:management-address?  oc-inet:ip-address
    +--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 frame-error-in?    yang:counter64
    | | +--ro frame-discard?     yang:counter64
    | | +--ro tlv-discard?       yang:counter64
    | | +--ro tlv-unknown?       yang:counter64
    | | +--ro last-clear?        yang:date-and-time
    | | +--ro tlv-accepted?      yang:counter64
    | | +--ro entries-aged-out?  yang:counter64
    | +--ro extr-lldp-ext:holdtime?       uint16
    | +--ro extr-lldp-ext:transmit?       boolean
    | +--ro extr-lldp-ext:receive?        boolean
    | +--ro extr-lldp-ext:management-address?  oc-inet:ip-address
    +--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
        | +--rw extr-lldp-ext:management-address?     oc-inet:ip-address
```

```
            |  +--rw extr-lldp-ext:suppress-tlv-advertisement*   identityref
            +--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 frame-error-in?     yang:counter64
            |  |  +--ro frame-discard?      yang:counter64
            |  |  +--ro tlv-discard?        yang:counter64
            |  |  +--ro tlv-unknown?        yang:counter64
            |  |  +--ro last-clear?         yang:date-and-time
            |  |  +--ro frame-error-out?    yang:counter64
            |  +--ro extr-lldp-ext:transmit?                     boolean
            |  +--ro extr-lldp-ext:receive?                      boolean
            |  +--ro extr-lldp-ext:management-address?           oc-inet:ip-address
            |  +--ro extr-lldp-ext:suppress-tlv-advertisement*   identityref
            +--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 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 custom-tlvs
                  |  +--ro tlv* [type oui oui-subtype]
                  |     +--ro type          -> ../state/type
                  |     +--ro oui           -> ../state/oui
                  |     +--ro oui-subtype   -> ../state/oui-subtype
                  |     +--ro config
                  |     +--ro state
                  |        +--ro type?         int32
                  |        +--ro oui?          string
                  |        +--ro oui-subtype?  string
                  |        +--ro value?        binary
                  +--ro capabilities
                     +--ro capability* [name]
                        +--ro name      -> ../state/name
                        +--ro config
                        +--ro state
                           +--ro name?      identityref
                           +--ro enabled?   boolean

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
    |  +--ro software-version?               string
    |  +--ro last-configuration-timestamp?   oc-types:timeticks64
    +--ro mount-points
    |  +--ro mount-point* [name]
    |     +--ro name     -> ../state/name
    |     +--ro state
    |        +--ro name?                string
    |        +--ro storage-component?   -> /oc-platform:components/component/name
    |        +--ro size?                uint64
    |        +--ro available?           uint64
    |        +--ro utilized?            uint64
    +--rw aaa
    |  +--rw authentication
    |  |  +--rw config
    |  |  |  +--rw authentication-method*   union
    |  |  +--ro state
    |  |  |  +--ro authentication-method*   union
    |  |  +--rw admin-user
    |  |  |  +--rw config
    |  |  |  |  +--rw admin-password?               string
    |  |  |  |  +--rw admin-password-hashed?        oc-aaa-types:crypt-password-type
    |  |  |  |  +--rw extr-aaa-ext:admin-username?  string
    |  |  |  +--ro state
    |  |  |     +--ro admin-password?        string
    |  |  |     +--ro admin-password-hashed?  oc-aaa-types:crypt-password-type
    |  |  |     +--ro admin-username?         string
    |  |  +--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
    |  |  |     |  +--rw extr-aaa-ext:inactivity-expiry-period?   uint8
    |  |  |     |  +--rw extr-aaa-ext:inactivity-warning-period?  uint8
    |  |  |     +--ro state
    |  |  |        +--ro username?                            string
    |  |  |        +--ro password?                            string
    |  |  |        +--ro password-hashed?                     oc-aaa-types:crypt-
password-type
    |  |  |        +--ro role                                 union
    |  |  |        +--ro extr-aaa-ext:inactivity-expiry-period?   uint8
    |  |  |        +--ro extr-aaa-ext:inactivity-warning-period?  uint8
    |  |  +--rw extr-aaa-ext:password-attributes
    |  |     +--rw extr-aaa-ext:config
    |  |     |  +--rw extr-aaa-ext:min-length?       uint8
    |  |     |  +--rw extr-aaa-ext:min-uppercase?    passwd-attr-type
    |  |     |  +--rw extr-aaa-ext:min-lowercase?    passwd-attr-type
    |  |     |  +--rw extr-aaa-ext:min-numeric?      passwd-attr-type
    |  |     |  +--rw extr-aaa-ext:min-special?      passwd-attr-type
    |  |     |  +--rw extr-aaa-ext:max-password-age? uint16
    |  |     |  +--rw extr-aaa-ext:max-retry?        uint8
    |  |     |  +--rw extr-aaa-ext:lockout-duration? uint32
    |  |     +--ro extr-aaa-ext:state
    |  |     |  +--ro extr-aaa-ext:min-length?       uint8
    |  |     |  +--ro extr-aaa-ext:min-uppercase?    passwd-attr-type
    |  |     |  +--ro extr-aaa-ext:min-lowercase?    passwd-attr-type
    |  |     |  +--ro extr-aaa-ext:min-numeric?      passwd-attr-type
    |  |     |  +--ro extr-aaa-ext:min-special?      passwd-attr-type
```

```
| |      | +--ro extr-aaa-ext:max-password-age?   uint16
| |      | +--ro extr-aaa-ext:max-retry?          uint8
| |      | +--ro extr-aaa-ext:lockout-duration?   uint32
| |    +--rw extr-aaa-ext:expiry-alert
| |       +--rw extr-aaa-ext:config
| |       | +--rw extr-aaa-ext:info?       alert-period
| |       | +--rw extr-aaa-ext:minor?      alert-period
| |       | +--rw extr-aaa-ext:major?      alert-period
| |       | +--rw extr-aaa-ext:critical?   alert-period
| |       +--ro extr-aaa-ext:state
| |          +--ro extr-aaa-ext:info?       alert-period
| |          +--ro extr-aaa-ext:minor?      alert-period
| |          +--ro extr-aaa-ext:major?      alert-period
| |          +--ro extr-aaa-ext:critical?   alert-period
| +--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 extr-aaa-ext:network-instance?  oc-ni:network-instance-
ref
| |       | | | +--rw extr-aaa-ext:source-interface?  string
| |       | | +--ro state
| |       | |    +--ro secret-key?                     oc-types:routing-password
| |       | |    +--ro extr-aaa-ext:network-instance?  oc-ni:network-instance-
ref
| |       | |    +--ro extr-aaa-ext:source-interface?  string
| |       | +--rw radius
| |       | | +--rw config
| |       | | | +--rw secret-key?                     oc-types:routing-password
| |       | | | +--rw extr-aaa-ext:radsec?            boolean
| |       | | | +--rw extr-aaa-ext:ssl-profile-id?    string
| |       | | | +--rw extr-aaa-ext:network-instance?  oc-ni:network-instance-
ref
```

```
| |          | | | +--rw extr-aaa-ext:source-interface?    string
| |          | | +--ro state
| |          | |    +--ro secret-key?                       oc-types:routing-password
| |          | |    +--ro extr-aaa-ext:radsec?              boolean
| |          | |    +--ro extr-aaa-ext:ssl-profile-id?      string
| |          | |    +--ro extr-aaa-ext:network-instance?    oc-ni:network-instance-
ref
| |          | |    +--ro extr-aaa-ext:source-interface?    string
| |          | +--rw extr-aaa-ext:ldap
| |          |    +--rw extr-aaa-ext:config
| |          |    | +--rw extr-aaa-ext:port?               oc-inet:port-number
| |          |    | +--rw extr-aaa-ext:ldaps?              boolean
| |          |    | +--rw extr-aaa-ext:ssl-profile-id?     string
| |          |    | +--rw extr-aaa-ext:base-dn?            string
| |          |    | +--rw extr-aaa-ext:network-instance?   oc-ni:network-instance-
ref
| |          |    | +--rw extr-aaa-ext:source-interface?   string
| |          |    +--ro extr-aaa-ext:state
| |          |       +--ro extr-aaa-ext:port?               oc-inet:port-number
| |          |       +--ro extr-aaa-ext:ldaps?              boolean
| |          |       +--ro extr-aaa-ext:ssl-profile-id?     string
| |          |       +--ro extr-aaa-ext:base-dn?            string
| |          |       +--ro extr-aaa-ext:network-instance?   oc-ni:network-instance-
ref
| |          |       +--ro extr-aaa-ext:source-interface?   string
| |      +--rw extr-aaa-ext:ldap-groups
| |         +--rw extr-aaa-ext:ldap-group* [name]
| |            +--rw extr-aaa-ext:name       -> ../config/name
| |            +--rw extr-aaa-ext:config
| |            | +--rw extr-aaa-ext:name?   string
| |            | +--rw extr-aaa-ext:role?   union
| |            +--ro extr-aaa-ext:state
| |               +--ro extr-aaa-ext:name?   string
| |               +--ro extr-aaa-ext:role?   union
| +--rw extr-aaa-token-ext:token-validators
|    +--rw extr-aaa-token-ext:token-validator* [name]
|       +--rw extr-aaa-token-ext:name      -> ../config/name
|       +--rw extr-aaa-token-ext:config
|       | +--rw extr-aaa-token-ext:name?             string
|       | +--rw extr-aaa-token-ext:ssl-profile-id?   string
|       | +--rw extr-aaa-token-ext:type?             enumeration
|       +--ro extr-aaa-token-ext:state
|          +--ro extr-aaa-token-ext:name?             string
|          +--ro extr-aaa-token-ext:ssl-profile-id?   string
|          +--ro extr-aaa-token-ext:type?             enumeration
+--rw logging
| +--rw console
| | +--rw config
| | | +--rw extr-system-logging-ext:monitor?          boolean
| | | +--rw extr-system-logging-ext:console?          boolean
| | | +--rw extr-system-logging-ext:monitor-severity?  syslog-severity
| | | +--rw extr-system-logging-ext:console-severity?  syslog-severity
| | +--ro state
| | +--rw selectors
| |    +--rw selector* [facility severity]
| |       +--rw facility    -> ../config/facility
| |       +--rw severity    -> ../config/severity
| |       +--rw config
| |       | +--rw facility?   identityref
| |       | +--rw severity?   syslog-severity
| |       +--ro state
| |          +--ro facility?   identityref
| |          +--ro severity?   syslog-severity
| +--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 network-instance?                        oc-ni:network-
instance-ref
    |  |  |  |  +--rw remote-port?                             oc-inet:port-number
    |  |  |  |  +--rw tls-profile-id?                          string
    |  |  |  |  +--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 network-instance?                        oc-ni:network-
instance-ref
    |  |  |     +--ro remote-port?                             oc-inet:port-number
    |  |  |     +--ro tls-profile-id?                          string
    |  |  |     +--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 processes
    |  +--ro process* [pid]
    |     +--ro pid      -> ../state/pid
    |     +--ro state
    |        +--ro pid?                 uint64
    |        +--ro name?                string
    |        +--ro args*                string
    |        +--ro start-time?          oc-types:timeticks64
    |        +--ro cpu-usage-user?      oc-yang:counter64
    |        +--ro cpu-usage-system?    oc-yang:counter64
    |        +--ro cpu-utilization?     oc-types:percentage
    |        +--ro memory-usage?        uint64
    |        +--ro memory-utilization?  oc-types:percentage
    +--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 clock
|  +--rw config
|  |  +--rw timezone-name?   timezone-name-type
|  +--ro state
|      +--ro timezone-name?   timezone-name-type
+--ro cpus
|  +--ro cpu* [index]
|     +--ro index    -> ../state/index
|     +--ro state
|        +--ro index?               union
|        +--ro total
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
|        |  +--ro min?       oc-types:percentage
|        |  +--ro max?       oc-types:percentage
|        |  +--ro interval?  oc-types:stat-interval
|        |  +--ro min-time?  oc-types:timeticks64
|        |  +--ro max-time?  oc-types:timeticks64
|        +--ro user
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
|        |  +--ro min?       oc-types:percentage
|        |  +--ro max?       oc-types:percentage
|        |  +--ro interval?  oc-types:stat-interval
|        |  +--ro min-time?  oc-types:timeticks64
|        |  +--ro max-time?  oc-types:timeticks64
|        +--ro kernel
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
|        |  +--ro min?       oc-types:percentage
|        |  +--ro max?       oc-types:percentage
|        |  +--ro interval?  oc-types:stat-interval
|        |  +--ro min-time?  oc-types:timeticks64
|        |  +--ro max-time?  oc-types:timeticks64
|        +--ro nice
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
|        |  +--ro min?       oc-types:percentage
|        |  +--ro max?       oc-types:percentage
|        |  +--ro interval?  oc-types:stat-interval
|        |  +--ro min-time?  oc-types:timeticks64
|        |  +--ro max-time?  oc-types:timeticks64
|        +--ro idle
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
|        |  +--ro min?       oc-types:percentage
|        |  +--ro max?       oc-types:percentage
|        |  +--ro interval?  oc-types:stat-interval
|        |  +--ro min-time?  oc-types:timeticks64
|        |  +--ro max-time?  oc-types:timeticks64
|        +--ro wait
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
|        |  +--ro min?       oc-types:percentage
|        |  +--ro max?       oc-types:percentage
|        |  +--ro interval?  oc-types:stat-interval
|        |  +--ro min-time?  oc-types:timeticks64
|        |  +--ro max-time?  oc-types:timeticks64
|        +--ro hardware-interrupt
|        |  +--ro instant?   oc-types:percentage
|        |  +--ro avg?       oc-types:percentage
```

```
|        |   +--ro min?         oc-types:percentage
|        |   +--ro max?         oc-types:percentage
|        |   +--ro interval?    oc-types:stat-interval
|        |   +--ro min-time?    oc-types:timeticks64
|        |   +--ro max-time?    oc-types:timeticks64
|        +--ro software-interrupt
|           +--ro instant?    oc-types:percentage
|           +--ro avg?        oc-types:percentage
|           +--ro min?        oc-types:percentage
|           +--ro max?        oc-types:percentage
|           +--ro interval?   oc-types:stat-interval
|           +--ro min-time?   oc-types:timeticks64
|           +--ro max-time?   oc-types:timeticks64
+--rw dns
|  +--rw config
|  |  +--rw search*   oc-inet:domain-name
|  +--ro state
|  |  +--ro search*   oc-inet:domain-name
|  +--rw servers
|     +--rw server* [address]
|        +--rw address   -> ../config/address
|        +--rw config
|        |  +--rw address?   oc-inet:ip-address
|        |  +--rw port?      oc-inet:port-number
|        +--ro state
|           +--ro address?   oc-inet:ip-address
|           +--ro port?      oc-inet:port-number
+--rw mac-address
|  +--rw config
|  |  +--rw routing-mac?   oc-yang:mac-address
|  +--ro state
|     +--ro routing-mac?   oc-yang:mac-address
+--rw memory
|  +--rw config
|  +--ro state
|     +--ro counters
|     |  +--ro correctable-ecc-errors?     uint64
|     |  +--ro uncorrectable-ecc-errors?   uint64
|     |  +--ro total-ecc-errors?           uint64
|     +--ro physical?   uint64
|     +--ro reserved?   uint64
|     +--ro used?       uint64
|     +--ro free?       uint64
+--rw ntp
|  +--rw config
|  |  +--rw enabled?                boolean
|  |  +--rw extr-sys-ext:use-vrf?   string
|  +--ro state
|  |  +--ro enabled?                         boolean
|  |  +--ro extr-sys-ext:use-vrf?            string
|  |  +--ro extr-sys-ext:active-server?      string
|  |  +--ro extr-sys-ext:active-server-offset?   uint64
|  +--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
|                +--ro stratum?            uint8
|                +--ro root-delay?         int64
|                +--ro root-dispersion?    int64
|                +--ro offset?             int64
|                +--ro poll-interval?      uint32
+--rw oc-sys-grpc:grpc-servers
|  +--rw oc-sys-grpc:grpc-server* [name]
|     +--rw oc-sys-grpc:name       -> ../config/name
|     +--rw oc-sys-grpc:config
|     |  +--rw oc-sys-grpc:name?                      string
|     |  +--rw oc-sys-grpc:services*                  identityref
|     |  +--rw oc-sys-grpc:enable?                    boolean
|     |  +--rw oc-sys-grpc:port?                      oc-inet:port-number
|     |  +--rw oc-sys-grpc:transport-security?        boolean
|     |  +--rw oc-sys-grpc:certificate-id?            string
|     |  +--rw oc-sys-grpc:metadata-authentication?   boolean
|     |  +--rw oc-sys-grpc:listen-addresses*          union
|     |  +--rw oc-sys-grpc:network-instance?          oc-ni:network-instance-ref
|     |  +--rw extr-system-grpc:mutual-tls?           boolean
|     +--ro oc-sys-grpc:state
|        +--ro oc-sys-grpc:name?                      string
|        +--ro oc-sys-grpc:services*                  identityref
|        +--ro oc-sys-grpc:enable?                    boolean
|        +--ro oc-sys-grpc:port?                      oc-inet:port-number
|        +--ro oc-sys-grpc:transport-security?        boolean
|        +--ro oc-sys-grpc:certificate-id?            string
|        +--ro oc-sys-grpc:metadata-authentication?   boolean
|        +--ro oc-sys-grpc:listen-addresses*          union
|        +--ro oc-sys-grpc:network-instance?          oc-ni:network-instance-ref
|        +--ro extr-system-grpc:mutual-tls?           boolean
+--rw extr-sys-transport-security:transport-security
|  +--rw extr-sys-transport-security:tls
|     +--rw extr-sys-transport-security:config
|     |  +--rw extr-sys-transport-security:min-version?   identityref
|     +--ro extr-sys-transport-security:state
|     |  +--ro extr-sys-transport-security:min-version?   identityref
|     +--rw extr-sys-transport-security:services
|        +--rw extr-sys-transport-security:service* [service]
|           +--rw extr-sys-transport-security:service    -> ../config/service
|           +--rw extr-sys-transport-security:config
|           |  +--rw extr-sys-transport-security:service?       identityref
|           |  +--rw extr-sys-transport-security:min-version?   identityref
|           +--ro extr-sys-transport-security:state
|              +--ro extr-sys-transport-security:service?       identityref
|              +--ro extr-sys-transport-security:min-version?   identityref
+--rw extr-sys-snmp:snmp-servers
|  +--rw extr-sys-snmp:snmp-server* [name]
|     +--rw extr-sys-snmp:name           -> ../config/name
|     +--rw extr-sys-snmp:config
|     |  +--rw extr-sys-snmp:name?   string
|     +--ro extr-sys-snmp:state
|     |  +--ro extr-sys-snmp:name?   string
|     +--rw extr-sys-snmp:vrfs
|     |  +--rw extr-sys-snmp:vrf* [name]
|     |     +--rw extr-sys-snmp:name       -> ../config/name
|     |     +--rw extr-sys-snmp:config
|     |     |  +--rw extr-sys-snmp:name?     string
|     |     |  +--rw extr-sys-snmp:enable?   boolean
|     |     +--ro extr-sys-snmp:state
```

```
|      |      |   +--ro extr-sys-snmp:name?     string
|      |      |   +--ro extr-sys-snmp:enable?   boolean
|      |      +--rw extr-sys-snmp:hosts
|      |         +--rw extr-sys-snmp:host* [hostname community-or-user-name]
|      |            +--rw extr-sys-snmp:hostname                       -> ../config/hostname
|      |            +--rw extr-sys-snmp:community-or-user-name   -> ../config/
community-or-user-name
|      |            +--rw extr-sys-snmp:config
|      |            |  +--rw extr-sys-snmp:hostname?              oc-inet-types:host
|      |            |  +--rw extr-sys-snmp:community-or-user-name?   string
|      |            |  +--rw extr-sys-snmp:udp-port?              uint16
|      |            |  +--rw extr-sys-snmp:version?              version-type
|      |            |  +--rw extr-sys-snmp:source-interface?     string
|      |            +--ro extr-sys-snmp:state
|      |               +--ro extr-sys-snmp:hostname?              oc-inet-types:host
|      |               +--ro extr-sys-snmp:community-or-user-name?   string
|      |               +--ro extr-sys-snmp:udp-port?              uint16
|      |               +--ro extr-sys-snmp:version?              version-type
|      |               +--ro extr-sys-snmp:source-interface?     string
|      +--rw extr-sys-snmp:communities
|      |  +--rw extr-sys-snmp:community* [community-name]
|      |     +--rw extr-sys-snmp:community-name   -> ../config/community-name
|      |     +--rw extr-sys-snmp:config
|      |     |  +--rw extr-sys-snmp:community-name?   string
|      |     +--ro extr-sys-snmp:state
|      |        +--ro extr-sys-snmp:community-name?   string
|      +--rw extr-sys-snmp:users
|         +--rw extr-sys-snmp:user* [name]
|            +--rw extr-sys-snmp:name       -> ../config/name
|            +--rw extr-sys-snmp:config
|            |  +--rw extr-sys-snmp:name?                 string
|            |  +--rw extr-sys-snmp:auth                  auth-type
|            |  +--rw extr-sys-snmp:auth-password?        string
|            |  +--rw extr-sys-snmp:auth-password-hashed?  string
|            |  +--rw extr-sys-snmp:priv?                 priv-type
|            |  +--rw extr-sys-snmp:priv-password?        string
|            |  +--rw extr-sys-snmp:priv-password-hashed?  string
|            +--ro extr-sys-snmp:state
|               +--ro extr-sys-snmp:name?                 string
|               +--ro extr-sys-snmp:auth                  auth-type
|               +--ro extr-sys-snmp:auth-password?        string
|               +--ro extr-sys-snmp:auth-password-hashed?  string
|               +--ro extr-sys-snmp:priv?                 priv-type
|               +--ro extr-sys-snmp:priv-password?        string
|               +--ro extr-sys-snmp:priv-password-hashed?  string
+--rw extr-sys-ext:global
|  +--rw extr-sys-ext:config
|  |  +--rw extr-sys-ext:ipv4-anycast-gateway-mac?  oc-yang:mac-address
|  |  +--rw extr-sys-ext:ipv6-anycast-gateway-mac?  oc-yang:mac-address
|  |  +--rw extr-sys-ext:l2-mtu?                    uint16
|  |  +--rw extr-sys-ext:ip-mtu?                    uint16
|  |  +--rw extr-sys-ext:contact?                   string
|  |  +--rw extr-sys-ext:location?                  string
|  +--ro extr-sys-ext:state
|     +--ro extr-sys-ext:ipv4-anycast-gateway-mac?  oc-yang:mac-address
|     +--ro extr-sys-ext:ipv6-anycast-gateway-mac?  oc-yang:mac-address
|     +--ro extr-sys-ext:l2-mtu?                    uint16
|     +--ro extr-sys-ext:ip-mtu?                    uint16
|     +--ro extr-sys-ext:contact?                   string
|     +--ro extr-sys-ext:location?                  string
+--rw extr-sys-ext:cli
|  +--rw extr-sys-ext:config
|  |  +--rw extr-sys-ext:unhide-secrets*   identityref
|  +--rw extr-sys-ext:state
```

```
    |     +--rw extr-sys-ext:unhide-secrets*    identityref
+--rw extr-sys-ext:rme
|  +--rw extr-sys-ext:config
|  |  +--rw extr-sys-ext:port?               oc-if:base-interface-ref
|  |  +--rw extr-sys-ext:performance-mode?   oc-if:base-interface-ref
|  +--ro extr-sys-ext:state
|     +--ro extr-sys-ext:port?               oc-if:base-interface-ref
|     +--ro extr-sys-ext:performance-mode?   oc-if:base-interface-ref
|     +--ro extr-sys-ext:redundancy?         string
|     +--ro extr-sys-ext:active?             string
|     +--ro extr-sys-ext:memberset?          string
|     +--ro extr-sys-ext:primary?            string
+--rw extr-sys-ext:grub
|  +--rw extr-sys-ext:config
|  |  +--rw extr-sys-ext:username?         string
|  |  +--rw extr-sys-ext:password?         string
|  |  +--rw extr-sys-ext:password-hashed?  oc-aaa-types:crypt-password-type
|  +--ro extr-sys-ext:state
|     +--ro extr-sys-ext:username?         string
|     +--ro extr-sys-ext:password?         string
|     +--ro extr-sys-ext:password-hashed?  oc-aaa-types:crypt-password-type
+--rw extr-sys-term-ext:ssh-servers
|  +--rw extr-sys-term-ext:ssh-server* [name]
|     +--rw extr-sys-term-ext:name       -> ../config/name
|     +--rw extr-sys-term-ext:config
|     |  +--rw extr-sys-term-ext:name?              string
|     |  +--rw extr-sys-term-ext:enable?            boolean
|     |  +--rw extr-sys-term-ext:network-instance?  oc-ni:network-instance-ref
|     |  +--rw extr-sys-term-ext:cipher*            identityref
|     |  +--rw extr-sys-term-ext:mac*               identityref
|     |  +--rw extr-sys-term-ext:key-exchange*      identityref
|     |  +--rw extr-sys-term-ext:client-alive?      uint16
|     +--ro extr-sys-term-ext:state
|     |  +--ro extr-sys-term-ext:name?              string
|     |  +--ro extr-sys-term-ext:enable?            boolean
|     |  +--ro extr-sys-term-ext:network-instance?  oc-ni:network-instance-ref
|     |  +--ro extr-sys-term-ext:cipher*            identityref
|     |  +--ro extr-sys-term-ext:mac*               identityref
|     |  +--ro extr-sys-term-ext:key-exchange*      identityref
|     |  +--ro extr-sys-term-ext:client-alive?      uint16
|     +--rw extr-sys-term-ext:key
|        +--rw extr-sys-term-ext:config
|        |  +--rw extr-sys-term-ext:rsa?      common-types:rsa-bits-size
|        |  +--rw extr-sys-term-ext:ecdsa?    common-types:ecdsa-bits-size
|        +--ro extr-sys-term-ext:state
|           +--ro extr-sys-term-ext:rsa?      common-types:rsa-bits-size
|           +--ro extr-sys-term-ext:ecdsa?    common-types:ecdsa-bits-size
+--rw extr-sys-term-ext:telnet-servers
|  +--rw extr-sys-term-ext:telnet-server* [name]
|     +--rw extr-sys-term-ext:name       -> ../config/name
|     +--rw extr-sys-term-ext:config
|     |  +--rw extr-sys-term-ext:name?              string
|     |  +--rw extr-sys-term-ext:enable?            boolean
|     |  +--rw extr-sys-term-ext:network-instance?  oc-ni:network-instance-ref
|     +--ro extr-sys-term-ext:state
|        +--ro extr-sys-term-ext:name?              string
|        +--ro extr-sys-term-ext:enable?            boolean
|        +--ro extr-sys-term-ext:network-instance?  oc-ni:network-instance-ref
+--rw extr-system-ztp:ztp
|  +--ro extr-system-ztp:dhcp-based
|     +--ro extr-system-ztp:remote-servers
|     |  +--ro extr-system-ztp:remote-server* [address]
|     |     +--ro extr-system-ztp:address               -> ../state/address
|     |     +--ro extr-system-ztp:state
```

```
|      |      |   +--ro extr-system-ztp:address?        oc-inet-types:host
|      |      |   +--ro extr-system-ztp:transfer-mode?   transfer-mode-type
|      |      |   +--ro extr-system-ztp:ztp-file?        string
|      |      +--ro extr-system-ztp:source-interface
|      |      |   +--ro extr-system-ztp:state
|      |      |      +--ro extr-system-ztp:name?          string
|      |      |      +--ro extr-system-ztp:ip-address?   oc-inet-types:host
|      |      +--ro extr-system-ztp:file-path
|      |      |   +--ro extr-system-ztp:state
|      |      |      +--ro extr-system-ztp:config-file?   string
|      |      |      +--ro extr-system-ztp:exec-file?     string
|      |      +--ro extr-system-ztp:firmware
|      |         +--ro extr-system-ztp:state
|      |            +--ro extr-system-ztp:path?     string
|      |            +--ro extr-system-ztp:status?   firmware-install-status-type
|      +--ro extr-system-ztp:state
|         +--ro extr-system-ztp:status?      ztp-dhcp-status
|         +--ro extr-system-ztp:client-id?   string
+--rw extr-cert-mgr-ext:certificate-manager
   +--rw extr-cert-mgr-ext:expiry-alert
      +--rw extr-cert-mgr-ext:config
      |  +--rw extr-cert-mgr-ext:info?       alert-period
      |  +--rw extr-cert-mgr-ext:minor?      alert-period
      |  +--rw extr-cert-mgr-ext:major?      alert-period
      |  +--rw extr-cert-mgr-ext:critical?   alert-period
      +--ro extr-cert-mgr-ext:state
         +--ro extr-cert-mgr-ext:info?       alert-period
         +--ro extr-cert-mgr-ext:minor?      alert-period
         +--ro extr-cert-mgr-ext:major?      alert-period
         +--ro extr-cert-mgr-ext:critical?   alert-period

module: openconfig-keychain
  +--rw keychains
     +--rw keychain* [name]
        +--rw name       -> ../config/name
        +--rw config
        |  +--rw name?       string
        |  +--rw tolerance?   union
        +--ro state
        |  +--ro name?       string
        |  +--ro tolerance?   union
        +--rw keys
           +--rw key* [key-id]
              +--rw key-id              -> ../config/key-id
              +--rw config
              |  +--rw key-id?           union
              |  +--rw secret-key?        string
              |  +--rw crypto-algorithm?   identityref
              +--ro state
              |  +--ro key-id?           union
              |  +--ro secret-key?        string
              |  +--ro crypto-algorithm?   identityref
              +--rw send-lifetime
              |  +--rw config
              |  |  +--rw start-time?        oc-types:timeticks64
              |  |  +--rw end-time?          oc-types:timeticks64
              |  |  +--rw send-and-receive?   boolean
              |  +--ro state
              |     +--ro start-time?        oc-types:timeticks64
              |     +--ro end-time?          oc-types:timeticks64
              |     +--ro send-and-receive?   boolean
              +--rw receive-lifetime
                 +--rw config
                 |  +--rw start-time?   oc-types:timeticks64
```

```
                   |  +--rw end-time?     oc-types:timeticks64
                   +--ro state
                      +--ro start-time?   oc-types:timeticks64
                      +--ro end-time?     oc-types:timeticks64

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
        |  x--ro id?                         string
        |  x--ro location?                   string
        |  +--ro install-position?           string
        |  +--ro install-component?          -> ../name
        |  +--ro software-version?           string
        |  +--ro part-no?                    string
        |  +--ro model-name?                 string
        |  +--ro clei-code?                  string
        |  +--ro oper-status?                identityref
        |  +--ro redundant-role?             oc-platform-types:component-redundant-role
        |  +--ro last-poweroff-reason
        |  |  +--ro trigger?   component-last-poweroff-reason-trigger
        |  |  +--ro details?   string
        |  +--ro last-poweroff-time?         oc-types:timeticks64
        |  +--ro last-switchover-reason
        |  |  +--ro trigger?   component-redundant-role-switchover-reason-trigger
        |  |  +--ro details?   string
        |  +--ro last-switchover-time?       oc-types:timeticks64
        |  +--ro last-reboot-reason?         identityref
        |  x--ro last-reboot-time?           oc-types:timeticks64
        |  +--ro switchover-ready?           boolean
        |  +--ro base-mac-address?           oc-yang:mac-address
        |  +--ro memory
        |  |  +--ro available?   uint64
        |  |  +--ro utilized?    uint64
        |  +--ro used-power?                 uint32
        |  +--ro pcie
        |  |  +--ro fatal-errors
        |  |  |  +--ro total-errors?                 oc-yang:counter64
        |  |  |  +--ro undefined-errors?             oc-yang:counter64
        |  |  |  +--ro data-link-errors?             oc-yang:counter64
        |  |  |  +--ro surprise-down-errors?         oc-yang:counter64
        |  |  |  +--ro poisoned-tlp-errors?          oc-yang:counter64
        |  |  |  +--ro flow-control-protocol-errors? oc-yang:counter64
        |  |  |  +--ro completion-timeout-errors?    oc-yang:counter64
        |  |  |  +--ro completion-abort-errors?      oc-yang:counter64
        |  |  |  +--ro unexpected-completion-errors? oc-yang:counter64
        |  |  |  +--ro receiver-overflow-errors?     oc-yang:counter64
        |  |  |  +--ro malformed-tlp-errors?         oc-yang:counter64
        |  |  |  +--ro ecrc-errors?                  oc-yang:counter64
        |  |  |  +--ro unsupported-request-errors?   oc-yang:counter64
        |  |  |  +--ro acs-violation-errors?         oc-yang:counter64
        |  |  |  +--ro internal-errors?              oc-yang:counter64
        |  |  |  +--ro blocked-tlp-errors?           oc-yang:counter64
        |  |  |  +--ro atomic-op-blocked-errors?     oc-yang:counter64
        |  |  |  +--ro tlp-prefix-blocked-errors?    oc-yang:counter64
        |  |  +--ro non-fatal-errors
        |  |  |  +--ro total-errors?                 oc-yang:counter64
        |  |  |  +--ro undefined-errors?             oc-yang:counter64
        |  |  |  +--ro data-link-errors?             oc-yang:counter64
```

```
|   |   |   +--ro surprise-down-errors?           oc-yang:counter64
|   |   |   +--ro poisoned-tlp-errors?            oc-yang:counter64
|   |   |   +--ro flow-control-protocol-errors?   oc-yang:counter64
|   |   |   +--ro completion-timeout-errors?      oc-yang:counter64
|   |   |   +--ro completion-abort-errors?        oc-yang:counter64
|   |   |   +--ro unexpected-completion-errors?   oc-yang:counter64
|   |   |   +--ro receiver-overflow-errors?       oc-yang:counter64
|   |   |   +--ro malformed-tlp-errors?           oc-yang:counter64
|   |   |   +--ro ecrc-errors?                    oc-yang:counter64
|   |   |   +--ro unsupported-request-errors?     oc-yang:counter64
|   |   |   +--ro acs-violation-errors?           oc-yang:counter64
|   |   |   +--ro internal-errors?                oc-yang:counter64
|   |   |   +--ro blocked-tlp-errors?             oc-yang:counter64
|   |   |   +--ro atomic-op-blocked-errors?       oc-yang:counter64
|   |   |   +--ro tlp-prefix-blocked-errors?      oc-yang:counter64
|   |   +--ro correctable-errors
|   |       +--ro total-errors?                oc-yang:counter64
|   |       +--ro receiver-errors?             oc-yang:counter64
|   |       +--ro bad-tlp-errors?              oc-yang:counter64
|   |       +--ro bad-dllp-errors?             oc-yang:counter64
|   |       +--ro relay-rollover-errors?       oc-yang:counter64
|   |       +--ro replay-timeout-errors?       oc-yang:counter64
|   |       +--ro advisory-non-fatal-errors?   oc-yang:counter64
|   |       +--ro internal-errors?             oc-yang:counter64
|   |       +--ro hdr-log-overflow-errors?     oc-yang:counter64
|   +--ro oc-platform-ext:entity-id?   uint32
+--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 utilization
|       +--rw resources
|           +--rw resource* [name]
|               +--rw name        -> ../config/name
|               +--rw config
|               |   +--rw name?                                string
|               |   +--rw used-threshold-upper?                oc-types:percentage
|               |   +--rw used-threshold-upper-clear?          oc-types:percentage
|               |   +--rw extr-platform-common-ext:poll-interval?   uint16
|               |   +--rw extr-platform-common-ext:poll-retry?      uint16
|               |   +--rw extr-platform-common-ext:action?          resource-action
|               +--ro state
|                   +--ro name?                                string
|                   +--ro used-threshold-upper?                oc-types:percentage
|                   +--ro used-threshold-upper-clear?          oc-types:percentage
|                   +--ro used?                                uint64
|                   +--ro committed?                           uint64
|                   +--ro free?                                uint64
```

```
          |                  +--ro max-limit?                               uint64
          |                  +--ro high-watermark?                          uint64
          |                  +--ro last-high-watermark?                     oc-
types:timeticks64
          |                  +--ro used-threshold-upper-exceeded?        boolean
          |                  +--ro extr-platform-common-ext:poll-interval?  uint16
          |                  +--ro extr-platform-common-ext:poll-retry?     uint16
          |                  +--ro extr-platform-common-ext:action?         resource-action
          +--rw port
          | +--rw config
          | | +--rw extr-port-config-ext:default-fec-mode?   extreme-eth-ext:fec-mode-type
          | | +--rw extr-port-config-ext:default-speed?      identityref
          | | +--rw extr-port-config-ext:supported-speed*    identityref
          | | +--rw extr-port-config-ext:supported-fec*      extreme-eth-ext:fec-mode-type
          | | +--rw extr-port-config-ext:port-group*         string
          | +--ro state
          | | +--ro extr-port-config-ext:default-fec-mode?   extreme-eth-ext:fec-mode-type
          | | +--ro extr-port-config-ext:default-speed?      identityref
          | | +--ro extr-port-config-ext:supported-speed*    identityref
          | | +--ro extr-port-config-ext:supported-fec*      extreme-eth-ext:fec-mode-type
          | | +--ro extr-port-config-ext:port-group*         string
          | +--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 oc-line-com:optical-port
          | | +--rw oc-line-com:config
          | | | +--rw oc-line-com:admin-state?   oc-opt-types:admin-state-type
          | | +--ro oc-line-com:state
          | |    +--ro oc-line-com:admin-state?        oc-opt-types:admin-state-type
          | |    +--ro oc-line-com:optical-port-type?  identityref
          | |    +--ro oc-line-com:tilt?               decimal64
          | |    +--ro oc-line-com:input-power
          | |    | +--ro oc-line-com:instant?   decimal64
          | |    | +--ro oc-line-com:avg?       decimal64
          | |    | +--ro oc-line-com:min?       decimal64
          | |    | +--ro oc-line-com:max?       decimal64
          | |    | +--ro oc-line-com:interval?  oc-types:stat-interval
          | |    | +--ro oc-line-com:min-time?  oc-types:timeticks64
          | |    | +--ro oc-line-com:max-time?  oc-types:timeticks64
          | |    +--ro oc-line-com:output-power
          | |       +--ro oc-line-com:instant?   decimal64
          | |       +--ro oc-line-com:avg?       decimal64
          | |       +--ro oc-line-com:min?       decimal64
          | |       +--ro oc-line-com:max?       decimal64
          | |       +--ro oc-line-com:interval?  oc-types:stat-interval
          | |       +--ro oc-line-com:min-time?  oc-types:timeticks64
          | |       +--ro oc-line-com:max-time?  oc-types:timeticks64
          | +--rw extr-port-config-ext:breakout-capabilities
          |   +--rw extr-port-config-ext:breakout-capability* [index]
          |      +--rw extr-port-config-ext:index     -> ../config/index
          |      +--rw extr-port-config-ext:config
          |      | +--rw extr-port-config-ext:index?                 uint8
          |      | +--rw extr-port-config-ext:num-breakouts?         uint8
```

```
|            |    +--rw extr-port-config-ext:breakout-speed?            identityref
|            |    +--rw extr-port-config-ext:num-physical-channels?      uint8
|            |    +--rw extr-port-config-ext:affected-port?              string
|            +--ro extr-port-config-ext:state
|                 +--ro extr-port-config-ext:index?                      uint8
|                 +--ro extr-port-config-ext:num-breakouts?              uint8
|                 +--ro extr-port-config-ext:breakout-speed?             identityref
|                 +--ro extr-port-config-ext:num-physical-channels?      uint8
|                 +--ro extr-port-config-ext:affected-port?              string
+--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 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 software-module
|  +--rw config
|  +--ro state
|     +--ro oc-sw-module:module-type?   identityref
+--rw controller-card
|  +--rw config
|  |  +--rw oc-ctrl-card:power-admin-state?   oc-platform-types:component-power-
type
|  +--ro state
|     +--ro oc-ctrl-card:power-admin-state?   oc-platform-types:component-power-
type
+--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:supply-voltage
        |  |  |  +--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
| | +--ro extr-transceiver-ext:baud-rate?                 uint64
| | +--ro extr-transceiver-ext:length-smf-km?             string
| | +--ro extr-transceiver-ext:length-smf-m?              uint64
| | +--ro extr-transceiver-ext:length50um-m?              uint64
| | +--ro extr-transceiver-ext:length625um-m?             uint64
| | +--ro extr-transceiver-ext:length-smf?               uint64
| | +--ro extr-transceiver-ext:length-om5?               uint64
| | +--ro extr-transceiver-ext:length-om4?               uint64
| | +--ro extr-transceiver-ext:length-om3?               uint64
| | +--ro extr-transceiver-ext:length-om2?               uint64
| | +--ro extr-transceiver-ext:length-om1?               uint64
| | +--ro extr-transceiver-ext:length-copper?            string
| | +--ro extr-transceiver-ext:wavelength?               uint64
| | +--ro extr-transceiver-ext:options?                  string
| | +--ro extr-transceiver-ext:br-max?                   uint64
| | +--ro extr-transceiver-ext:br-min?                   uint64
| | +--ro extr-transceiver-ext:supported-speeds*         identityref
| | +--ro extr-transceiver-ext:supported-fec*            extreme-eth-ext:fec-
mode-type
| | +--ro extr-transceiver-ext:media-type?               string
| | +--ro extr-transceiver-ext:supports-breakout?        string
| | +--ro extr-transceiver-ext:qualified?                boolean
| | +--ro extr-transceiver-ext:qsa-adapter?              boolean
| | +--ro extr-transceiver-ext:qsa-vendor?               string
| | +--ro extr-transceiver-ext:qsa-serialnumber?         string
| | +--ro extr-transceiver-ext:qsa-partnumber?           string
| | +--ro extr-transceiver-ext:qsa-revdate?              string
| | +--ro extr-transceiver-ext:high-warn-temp-threshold?  string
| | +--ro extr-transceiver-ext:high-alarm-temp-threshold? string
| +--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:laser-age?                   oc-
types:percentage
|          +--ro oc-transceiver:laser-temperature
|          | +--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:target-frequency-deviation
|              |  +--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:tec-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 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
|              +--ro extr-transceiver-ext:baud-rate?                    uint64
|              +--ro extr-transceiver-ext:length-smf-km?                string
|              +--ro extr-transceiver-ext:length-smf-m?                 uint64
|              +--ro extr-transceiver-ext:length50um-m?                 uint64
```

```
            |              +--ro extr-transceiver-ext:length625um-m?              uint64
            |              +--ro extr-transceiver-ext:length-smf?                  uint64
            |              +--ro extr-transceiver-ext:length-om5?                  uint64
            |              +--ro extr-transceiver-ext:length-om4?                  uint64
            |              +--ro extr-transceiver-ext:length-om3?                  uint64
            |              +--ro extr-transceiver-ext:length-om2?                  uint64
            |              +--ro extr-transceiver-ext:length-om1?                  uint64
            |              +--ro extr-transceiver-ext:length-copper?               string
            |              +--ro extr-transceiver-ext:wavelength?                  uint64
            |              +--ro extr-transceiver-ext:options?                     string
            |              +--ro extr-transceiver-ext:br-max?                      uint64
            |              +--ro extr-transceiver-ext:br-min?                      uint64
            |              +--ro extr-transceiver-ext:supported-speeds*            identityref
            |              +--ro extr-transceiver-ext:supported-fec*               extreme-eth-
ext:fec-mode-type
            |              +--ro extr-transceiver-ext:media-type?                  string
            |              +--ro extr-transceiver-ext:supports-breakout?           string
            |              +--ro extr-transceiver-ext:qualified?                   boolean
            |              +--ro extr-transceiver-ext:qsa-adapter?                 boolean
            |              +--ro extr-transceiver-ext:qsa-vendor?                  string
            |              +--ro extr-transceiver-ext:qsa-serialnumber?            string
            |              +--ro extr-transceiver-ext:qsa-partnumber?              string
            |              +--ro extr-transceiver-ext:qsa-revdate?                 string
            |              +--ro extr-transceiver-ext:high-warn-temp-threshold?    string
            |              +--ro extr-transceiver-ext:high-alarm-temp-threshold?   string
         +--rw oc-opt-term:optical-channel
         |  +--rw oc-opt-term:config
         |  |  +--rw oc-opt-term:frequency?             oc-opt-types:frequency-type
         |  |  +--rw oc-opt-term:target-output-power?   decimal64
         |  |  +--rw oc-opt-term:operational-mode?      uint16
         |  |  +--rw oc-opt-term:line-port?             -> /oc-platform:components/
component/name
         |  +--ro oc-opt-term:state
         |     +--ro oc-opt-term:frequency?                            oc-opt-
types:frequency-type
         |     +--ro oc-opt-term:target-output-power?                  decimal64
         |     +--ro oc-opt-term:operational-mode?                     uint16
         |     +--ro oc-opt-term:line-port?                            -> /oc-
platform:components/component/name
         |     +--ro oc-opt-term:group-id?                             uint32
         |     +--ro oc-opt-term:output-power
         |     |  +--ro oc-opt-term:instant?     decimal64
         |     |  +--ro oc-opt-term:avg?         decimal64
         |     |  +--ro oc-opt-term:min?         decimal64
         |     |  +--ro oc-opt-term:max?         decimal64
         |     |  +--ro oc-opt-term:interval?    oc-types:stat-interval
         |     |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
         |     |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
         |     +--ro oc-opt-term:input-power
         |     |  +--ro oc-opt-term:instant?     decimal64
         |     |  +--ro oc-opt-term:avg?         decimal64
         |     |  +--ro oc-opt-term:min?         decimal64
         |     |  +--ro oc-opt-term:max?         decimal64
         |     |  +--ro oc-opt-term:interval?    oc-types:stat-interval
         |     |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
         |     |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
         |     +--ro oc-opt-term:laser-bias-current
         |     |  +--ro oc-opt-term:instant?     decimal64
         |     |  +--ro oc-opt-term:avg?         decimal64
         |     |  +--ro oc-opt-term:min?         decimal64
         |     |  +--ro oc-opt-term:max?         decimal64
         |     |  +--ro oc-opt-term:interval?    oc-types:stat-interval
         |     |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
         |     |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
```

```
|        +--ro oc-opt-term:chromatic-dispersion
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:polarization-mode-dispersion
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:second-order-polarization-mode-dispersion
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:polarization-dependent-loss
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:modulator-bias-xi
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:modulator-bias-xq
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:modulator-bias-yi
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|        +--ro oc-opt-term:modulator-bias-yq
|        |  +--ro oc-opt-term:instant?     decimal64
|        |  +--ro oc-opt-term:avg?         decimal64
|        |  +--ro oc-opt-term:min?         decimal64
|        |  +--ro oc-opt-term:max?         decimal64
|        |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|        |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|        |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
```

```
          |         +--ro oc-opt-term:modulator-bias-x-phase
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:modulator-bias-y-phase
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:osnr
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:carrier-frequency-offset
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:sop-roc
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:modulation-error-ratio
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:fec-uncorrectable-blocks?
yang:counter64
          |         +--ro oc-opt-term:pre-fec-ber
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
          |         |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
          |         |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
          |         +--ro oc-opt-term:post-fec-ber
          |         |  +--ro oc-opt-term:instant?     decimal64
          |         |  +--ro oc-opt-term:avg?         decimal64
          |         |  +--ro oc-opt-term:min?         decimal64
          |         |  +--ro oc-opt-term:max?         decimal64
          |         |  +--ro oc-opt-term:interval?    oc-types:stat-interval
```

```
|      |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|      |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|      +--ro oc-opt-term:q-value
|      |  +--ro oc-opt-term:instant?     decimal64
|      |  +--ro oc-opt-term:avg?         decimal64
|      |  +--ro oc-opt-term:min?         decimal64
|      |  +--ro oc-opt-term:max?         decimal64
|      |  +--ro oc-opt-term:interval?    oc-types:stat-interval
|      |  +--ro oc-opt-term:min-time?    oc-types:timeticks64
|      |  +--ro oc-opt-term:max-time?    oc-types:timeticks64
|      +--ro oc-opt-term:esnr
|         +--ro oc-opt-term:instant?     decimal64
|         +--ro oc-opt-term:avg?         decimal64
|         +--ro oc-opt-term:min?         decimal64
|         +--ro oc-opt-term:max?         decimal64
|         +--ro oc-opt-term:interval?    oc-types:stat-interval
|         +--ro oc-opt-term:min-time?    oc-types:timeticks64
|         +--ro oc-opt-term:max-time?    oc-types:timeticks64
+--rw oc-linecard:linecard
|  +--rw oc-linecard:config
|  |  +--rw oc-linecard:power-admin-state?   oc-platform-types:component-power-
type
|  +--ro oc-linecard:state
|  |  +--ro oc-linecard:power-admin-state?   oc-platform-types:component-power-
type
|  |  x--ro oc-linecard:slot-id?             string
|  +--rw oc-linecard:utilization
|     +--rw oc-linecard:resources
|        +--rw oc-linecard:resource* [name]
|           +--rw oc-linecard:name      -> ../config/name
|           +--rw oc-linecard:config
|           |  +--rw oc-linecard:name?                          string
|           |  +--rw oc-linecard:used-threshold-upper?           oc-types:percentage
|           |  +--rw oc-linecard:used-threshold-upper-clear?    oc-types:percentage
|           +--ro oc-linecard:state
|              +--ro oc-linecard:name?                          string
|              +--ro oc-linecard:used-threshold-upper?           oc-
types:percentage
|              +--ro oc-linecard:used-threshold-upper-clear?    oc-
types:percentage
|              +--ro oc-linecard:used?                          uint64
|              +--ro oc-linecard:committed?                     uint64
|              +--ro oc-linecard:free?                          uint64
|              +--ro oc-linecard:max-limit?                     uint64
|              +--ro oc-linecard:high-watermark?                uint64
|              +--ro oc-linecard:last-high-watermark?           oc-
types:timeticks64
|              +--ro oc-linecard:used-threshold-upper-exceeded?   boolean
+--rw extr-bmc:bmc
   +--rw extr-bmc:interfaces
      +--rw extr-bmc:interface* [id]
         +--rw extr-bmc:id        -> ../config/id
         +--rw extr-bmc:config
         |  +--rw extr-bmc:id?          uint32
         |  +--rw extr-bmc:ip-mode?     string
         |  +--rw extr-bmc:ip-gateway?  oc-inet:ipv4-address
         |  +--rw extr-bmc:netmask?     oc-inet:ipv4-address
         |  +--rw extr-bmc:ip-address?  oc-inet:ipv4-address
         |  +--rw extr-bmc:enable?      boolean
         +--ro extr-bmc:state
            +--ro extr-bmc:id?          uint32
            +--ro extr-bmc:ip-mode?     string
            +--ro extr-bmc:ip-gateway?  oc-inet:ipv4-address
            +--ro extr-bmc:netmask?     oc-inet:ipv4-address
```

```
+--ro extr-bmc:ip-address?   oc-inet:ipv4-address
+--ro extr-bmc:enable?       boolean
```
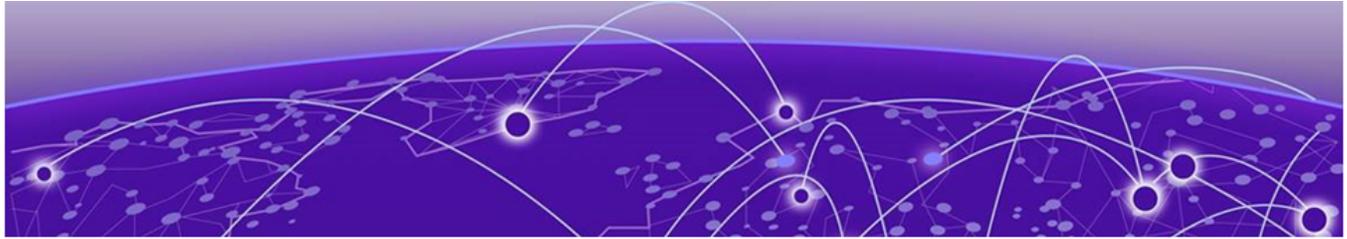
YANG Module - Extreme ONE OS Switching

Extreme ONE OS Switching supports the following OpenConfig YANG data modules for v5.3.0:

- module: opencofig-qos
- module: opencofig-bfd
- module: opencofig-acl
- module: opencofig-lacp
- module: opencofig-network-instance
- module: opencofig-system
- module: opencofig-interfaces
- module: opencofig-ethernet-segments
- module: opencofig-routing-policy
- module: opencofig-lldp
- module: extreme-load-balance
- module: extreme-mirror
- module: extreme-overlay-networks
- module: extreme-mlag

```
module: opencofig-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 input
     |     |  +--rw config
     |     |  |  +--rw extr-qos-ext:traffic-class-map?   string
     |     |  |  +--rw extr-qos-ext:trust-cos?           boolean
     |     |  |  +--rw extr-qos-ext:trust-dscp?          boolean
     |     |  +--ro state
     |     |     +--ro extr-qos-ext:traffic-class-map?   string
     |     |     +--ro extr-qos-ext:trust-cos?           boolean
     |     |     +--ro extr-qos-ext:trust-dscp?          boolean
     |     +--rw output
     |        +--rw config
     |        |  +--rw extr-qos-ext:remark-map?    string
     |        |  +--rw extr-qos-ext:remark-cos?    boolean
```

```
|           |   +--rw extr-qos-ext:remark-dscp?    boolean
|           +--ro state
|           |   +--ro extr-qos-ext:remark-map?     string
|           |   +--ro extr-qos-ext:remark-cos?     boolean
|           |   +--ro extr-qos-ext:remark-dscp?    boolean
|           +--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
|                    +--ro dropped-octets?    oc-yang:counter64
+--rw queues
|  +--rw queue* [name]
|     +--rw name       -> ../config/name
|     +--rw config
|     |  +--rw name?   string
|     +--ro state
|        +--ro name?   string
+--rw extr-qos-ext:maps
|  +--rw extr-qos-ext:traffic-class-maps
|  |  +--rw extr-qos-ext:traffic-class-map* [name]
|  |     +--rw extr-qos-ext:name           -> ../config/name
|  |     +--rw extr-qos-ext:config
|  |     |  +--rw extr-qos-ext:name?                    string
|  |     |  +--rw extr-qos-ext:default-traffic-class?   uint8
|  |     +--ro extr-qos-ext:state
|  |     |  +--ro extr-qos-ext:name?                    string
|  |     |  +--ro extr-qos-ext:default-traffic-class?   uint8
|  |     +--rw extr-qos-ext:cos-maps
|  |     |  +--rw extr-qos-ext:cos-map* [cos]
|  |     |     +--rw extr-qos-ext:cos         -> ../config/cos
|  |     |     +--rw extr-qos-ext:config
|  |     |     |  +--rw extr-qos-ext:cos?             uint8
|  |     |     |  +--rw extr-qos-ext:traffic-class?     uint8
|  |     |     |  +--rw extr-qos-ext:drop-precedence?   extr-qos-types:drop-
precedence-level
|  |     |     +--ro extr-qos-ext:state
|  |     |        +--ro extr-qos-ext:cos?             uint8
|  |     |        +--ro extr-qos-ext:traffic-class?     uint8
|  |     |        +--ro extr-qos-ext:drop-precedence?   extr-qos-types:drop-
precedence-level
|  |     +--rw extr-qos-ext:dscp-maps
|  |        +--rw extr-qos-ext:dscp-map* [dscp]
|  |           +--rw extr-qos-ext:dscp        -> ../config/dscp
|  |           +--rw extr-qos-ext:config
|  |           |  +--rw extr-qos-ext:dscp?               oc-inet:dscp
|  |           |  +--rw extr-qos-ext:traffic-class?     uint8
|  |           |  +--rw extr-qos-ext:drop-precedence?   extr-qos-types:drop-
precedence-level
|  |           +--ro extr-qos-ext:state
|  |              +--ro extr-qos-ext:dscp?               oc-inet:dscp
|  |              +--ro extr-qos-ext:traffic-class?     uint8
|  |              +--ro extr-qos-ext:drop-precedence?   extr-qos-types:drop-
precedence-level
|  +--rw extr-qos-ext:remark-maps
|     +--rw extr-qos-ext:remark-map* [name]
|        +--rw extr-qos-ext:name                  -> ../config/name
|        +--rw extr-qos-ext:config
|        |  +--rw extr-qos-ext:name?   string
```

```
|          +--ro extr-qos-ext:state
|          | +--ro extr-qos-ext:name?   string
|          +--rw extr-qos-ext:traffic-class-maps
|             +--rw extr-qos-ext:traffic-class-map* [traffic-class drop-precedence]
|                +--rw extr-qos-ext:traffic-class      -> ../config/traffic-class
|                +--rw extr-qos-ext:drop-precedence    -> ../config/drop-precedence
|                +--rw extr-qos-ext:config
|                | +--rw extr-qos-ext:traffic-class?     uint8
|                | +--rw extr-qos-ext:drop-precedence?   extr-qos-types:drop-
precedence-level
|                | +--rw extr-qos-ext:cos?               uint8
|                | +--rw extr-qos-ext:dscp?              oc-inet:dscp
|                +--ro extr-qos-ext:state
|                   +--ro extr-qos-ext:traffic-class?     uint8
|                   +--ro extr-qos-ext:drop-precedence?   extr-qos-types:drop-
precedence-level
|                   +--ro extr-qos-ext:cos?               uint8
|                   +--ro extr-qos-ext:dscp?              oc-inet:dscp
+--rw extr-qos-ext:nvos
   +--rw extr-qos-ext:nvo* [name]
      +--rw extr-qos-ext:name            -> ../config/name
      +--rw extr-qos-ext:config
      | +--rw extr-qos-ext:name?   string
      +--ro extr-qos-ext:state
      | +--ro extr-qos-ext:name?   string
      +--rw extr-qos-ext:tunnel-mode
         +--rw extr-qos-ext:config
         | +--rw extr-qos-ext:encapsulation?   extr-qos-types:tunnel-mode-type
         | +--rw extr-qos-ext:dscp?            oc-inet:dscp
         | +--rw extr-qos-ext:decapsulation?   extr-qos-types:tunnel-mode-type
         +--ro extr-qos-ext:state
            +--ro extr-qos-ext:encapsulation?   extr-qos-types:tunnel-mode-type
            +--ro extr-qos-ext:dscp?            oc-inet:dscp
            +--ro extr-qos-ext:decapsulation?   extr-qos-types:tunnel-mode-type

module: openconfig-bfd
  +--rw bfd
     +--rw interfaces
     | +--rw interface* [id]
     |    +--rw id        -> ../config/id
     |    +--rw config
     |    | +--rw id?                 oc-if:interface-id
     |    | +--rw enabled?            boolean
     |    | +--rw extr-bfd-ext:profile?   profile-ref
     |    +--ro state
     |    | +--ro id?                 oc-if:interface-id
     |    | +--ro enabled?            boolean
     |    | +--ro extr-bfd-ext:profile?   profile-ref
     |    +--rw peers
     |       +--ro peer* [local-discriminator]
     |          +--ro local-discriminator      -> ../state/local-discriminator
     |          +--ro state
     |          | +--ro local-address?                            oc-inet:ip-
address
     |          | +--ro remote-address?                           oc-inet:ip-
address
     |          | +--ro subscribed-protocols*                     identityref
     |          | +--ro session-state?                            bfd-session-
state
     |          | +--ro remote-session-state?                     bfd-session-
state
     |          | +--ro last-failure-time?                        oc-
types:timeticks64
     |          | +--ro failure-transitions?                      uint64
```

```
      |               | +--ro local-discriminator?                              string
      |               | +--ro remote-discriminator?                             string
      |               | +--ro local-diagnostic-code?                            bfd-diagnostic-
code
      |               | +--ro remote-diagnostic-code?                           bfd-diagnostic-
code
      |               | +--ro remote-minimum-receive-interval?          uint32
      |               | +--ro async
      |               | | +--ro transmitted-packets?   uint64
      |               | | +--ro received-packets?      uint64
      |               | | x--ro up-transitions?        uint64
      |               | +--ro extr-bfd-ext:session-id?                          uint32
      |               | +--ro extr-bfd-ext:vrf-name?                            string
      |               | +--ro extr-bfd-ext:remote-minimum-transmit-interval?    uint32
      |               | +--ro extr-bfd-ext:remote-detection-multiplier?         uint32
      |               | +--ro extr-bfd-ext:last-up-time?                        oc-
types:timeticks64
      |               | +--ro extr-bfd-ext:applied-profile?                     string
      |               +--ro extr-bfd-ext:profiles
      |                  +--ro extr-bfd-ext:profile* [subscribed-protocol]
      |                     +--ro extr-bfd-ext:subscribed-protocol    -> ../state/subscribed-
protocol
      |                     +--ro extr-bfd-ext:state
      |                        +--ro extr-bfd-ext:subscribed-protocol?   identityref
      |                        +--ro extr-bfd-ext:proto-profiles*        string
      +--rw extr-bfd-ext:bfd-profiles
      | +--rw extr-bfd-ext:bfd-profile* [name]
      |    +--rw extr-bfd-ext:name      -> ../config/name
      |    +--rw extr-bfd-ext:config
      |    | +--rw extr-bfd-ext:name?                         string
      |    | +--rw extr-bfd-ext:desired-minimum-tx-interval?  uint32
      |    | +--rw extr-bfd-ext:required-minimum-receive?     uint32
      |    | +--rw extr-bfd-ext:detection-multiplier?         uint8
      |    +--ro extr-bfd-ext:state
      |       +--ro extr-bfd-ext:name?                         string
      |       +--ro extr-bfd-ext:desired-minimum-tx-interval?  uint32
      |       +--ro extr-bfd-ext:required-minimum-receive?     uint32
      |       +--ro extr-bfd-ext:detection-multiplier?         uint8
      +--rw extr-bfd-ext:global
         +--rw extr-bfd-ext:state
            +--rw extr-bfd-ext:session-count-above-system-limit?   uint16

module: openconfig-acl
  +--rw acl
     +--rw config
     | +--rw extr-acl-ext:count?   boolean
     +--ro state
     | +--ro extr-acl-ext:count?   boolean
     +--rw acl-sets
     | +--rw acl-set* [name type]
     |    +--rw name           -> ../config/name
     |    +--rw type           -> ../config/type
     |    +--rw config
     |    | +--rw name?   string
     |    | +--rw type?   identityref
     |    +--ro state
     |    | +--ro name?   string
     |    | +--ro type?   identityref
     |    +--rw acl-entries
     |       +--rw acl-entry* [sequence-id]
     |          +--rw sequence-id              -> ../config/sequence-id
     |          +--rw config
     |          | +--rw sequence-id?   uint32
     |          +--ro state
```

```
        |             | +--ro sequence-id?        uint32
        |             | +--ro matched-packets?    oc-yang:counter64
        |             | +--ro matched-octets?     oc-yang:counter64
        |             +--rw actions
        |             | +--rw config
        |             | | +--rw forwarding-action     identityref
        |             | | +--rw extr-acl-ext:count?    boolean
        |             | +--ro state
        |             |    +--ro forwarding-action     identityref
        |             |    +--ro extr-acl-ext:count?    boolean
        |             +--rw extr-acl-mac-ext:acl-mac
        |             | +--rw extr-acl-mac-ext:config
        |             | | +--rw extr-acl-mac-ext:source-mac?             oc-yang:mac-address
        |             | | +--rw extr-acl-mac-ext:source-mac-mask?        oc-yang:mac-address
        |             | | +--rw extr-acl-mac-ext:destination-mac?        oc-yang:mac-address
        |             | | +--rw extr-acl-mac-ext:destination-mac-mask?   oc-yang:mac-address
        |             | | +--rw extr-acl-mac-ext:pcp?                    uint8
        |             | | +--rw extr-acl-mac-ext:ethertype?              oc-pkt-match-
types:ethertype-type
        |             | | +--rw extr-acl-mac-ext:vlan-tag?               uint16
        |             | +--ro extr-acl-mac-ext:state
        |             |    +--ro extr-acl-mac-ext:source-mac?            oc-yang:mac-address
        |             |    +--ro extr-acl-mac-ext:source-mac-mask?       oc-yang:mac-address
        |             |    +--ro extr-acl-mac-ext:destination-mac?       oc-yang:mac-address
        |             |    +--ro extr-acl-mac-ext:destination-mac-mask?  oc-yang:mac-address
        |             |    +--ro extr-acl-mac-ext:pcp?                   uint8
        |             |    +--ro extr-acl-mac-ext:ethertype?             oc-pkt-match-
types:ethertype-type
        |             |    +--ro extr-acl-mac-ext:vlan-tag?              uint16
        |             +--rw extr-acl-ipv6-ext:acl-ipv6
        |             | +--rw extr-acl-ipv6-ext:config
        |             | | +--rw extr-acl-ipv6-ext:source-ipv6?          oc-inet:ipv6-
address
        |             | | +--rw extr-acl-ipv6-ext:source-ipv6-mask?     oc-inet:ipv6-
address
        |             | | +--rw extr-acl-ipv6-ext:destination-ipv6?     oc-inet:ipv6-
address
        |             | | +--rw extr-acl-ipv6-ext:destination-ipv6-mask?  oc-inet:ipv6-
address
        |             | | +--rw extr-acl-ipv6-ext:dscp?                 oc-inet:dscp
        |             | | +--rw extr-acl-ipv6-ext:protocol?             oc-pkt-match-
types:ip-protocol-type
        |             | | +--rw extr-acl-ipv6-ext:vlan-tag?             uint16
        |             | | +--rw extr-acl-ipv6-ext:source-port?          oc-pkt-match-
types:port-num-range
        |             | | +--rw extr-acl-ipv6-ext:destination-port?     oc-pkt-match-
types:port-num-range
        |             | | +--rw extr-acl-ipv6-ext:tcp-flags*            identityref
        |             | +--ro extr-acl-ipv6-ext:state
        |             |    +--ro extr-acl-ipv6-ext:source-ipv6?         oc-inet:ipv6-
address
        |             |    +--ro extr-acl-ipv6-ext:source-ipv6-mask?    oc-inet:ipv6-
address
        |             |    +--ro extr-acl-ipv6-ext:destination-ipv6?    oc-inet:ipv6-
address
        |             |    +--ro extr-acl-ipv6-ext:destination-ipv6-mask?  oc-inet:ipv6-
address
        |             |    +--ro extr-acl-ipv6-ext:dscp?                oc-inet:dscp
        |             |    +--ro extr-acl-ipv6-ext:protocol?            oc-pkt-match-
types:ip-protocol-type
        |             |    +--ro extr-acl-ipv6-ext:vlan-tag?            uint16
        |             |    +--ro extr-acl-ipv6-ext:source-port?         oc-pkt-match-
types:port-num-range
        |             |    +--ro extr-acl-ipv6-ext:destination-port?    oc-pkt-match-
```

```
types:port-num-range
        |               |        +--ro extr-acl-ipv6-ext:tcp-flags*               identityref
        |               +--rw extr-acl-ipv4-ext:acl-ipv4
        |                  +--rw extr-acl-ipv4-ext:config
        |                  |  +--rw extr-acl-ipv4-ext:source-ipv4?          oc-inet:ipv4-
address
        |                  |  +--rw extr-acl-ipv4-ext:source-ipv4-mask?     oc-inet:ipv4-
address
        |                  |  +--rw extr-acl-ipv4-ext:destination-ipv4?     oc-inet:ipv4-
address
        |                  |  +--rw extr-acl-ipv4-ext:destination-ipv4-mask?  oc-inet:ipv4-
address
        |                  |  +--rw extr-acl-ipv4-ext:dscp?                 oc-inet:dscp
        |                  |  +--rw extr-acl-ipv4-ext:protocol?             oc-pkt-match-
types:ip-protocol-type
        |                  |  +--rw extr-acl-ipv4-ext:vlan-tag?             uint16
        |                  |  +--rw extr-acl-ipv4-ext:source-port?          oc-pkt-match-
types:port-num-range
        |                  |  +--rw extr-acl-ipv4-ext:destination-port?     oc-pkt-match-
types:port-num-range
        |                  |  +--rw extr-acl-ipv4-ext:tcp-flags*            identityref
        |                  +--ro extr-acl-ipv4-ext:state
        |                     +--ro extr-acl-ipv4-ext:source-ipv4?          oc-inet:ipv4-
address
        |                     +--ro extr-acl-ipv4-ext:source-ipv4-mask?     oc-inet:ipv4-
address
        |                     +--ro extr-acl-ipv4-ext:destination-ipv4?     oc-inet:ipv4-
address
        |                     +--ro extr-acl-ipv4-ext:destination-ipv4-mask?  oc-inet:ipv4-
address
        |                     +--ro extr-acl-ipv4-ext:dscp?                 oc-inet:dscp
        |                     +--ro extr-acl-ipv4-ext:protocol?             oc-pkt-match-
types:ip-protocol-type
        |                     +--ro extr-acl-ipv4-ext:vlan-tag?             uint16
        |                     +--ro extr-acl-ipv4-ext:source-port?          oc-pkt-match-
types:port-num-range
        |                     +--ro extr-acl-ipv4-ext:destination-port?     oc-pkt-match-
types:port-num-range
        |                     +--ro extr-acl-ipv4-ext:tcp-flags*            identityref
     +--rw interfaces
     |  +--rw interface* [id]
     |     +--rw id                    -> ../config/id
     |     +--rw config
     |     |  +--rw id?   oc-if:interface-id
     |     +--ro state
     |     |  +--ro id?   oc-if:interface-id
     |     +--rw ingress-acl-sets
     |     |  +--rw ingress-acl-set* [set-name type]
     |     |     +--rw set-name    -> ../config/set-name
     |     |     +--rw type        -> ../config/type
     |     |     +--rw config
     |     |     |  +--rw set-name?   -> ../../../../../../acl-sets/acl-set/config/name
     |     |     |  +--rw type?       -> ../../../../../../acl-sets/acl-
set[name=current()/../set-name]/config/type
     |     |     +--ro state
     |     |        +--ro set-name?   -> ../../../../../../acl-sets/acl-set/config/name
     |     |        +--ro type?       -> ../../../../../../acl-sets/acl-
set[name=current()/../set-name]/config/type
     |     +--rw egress-acl-sets
     |        +--rw egress-acl-set* [set-name type]
     |           +--rw set-name    -> ../config/set-name
     |           +--rw type        -> ../config/type
     |           +--rw config
     |           |  +--rw set-name?   -> ../../../../../../acl-sets/acl-set/config/name
```

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```
      |              |  +--rw type?       -> ../../../../../../acl-sets/acl-
set[name=current()/../set-name]/config/type
      |              +--ro state
      |                 +--ro set-name?   -> ../../../../../../acl-sets/acl-set/config/name
      |                 +--ro type?       -> ../../../../../../acl-sets/acl-
set[name=current()/../set-name]/config/type
      +--rw extr-acl-ext:rbid-maps
         +--rw extr-acl-ext:rbid-map* [rbid]
            +--rw extr-acl-ext:rbid       -> ../config/rbid
            +--rw extr-acl-ext:config
            |  +--rw extr-acl-ext:rbid?   uint64
            +--ro extr-acl-ext:state
               +--ro extr-acl-ext:rbid?                    uint64
               +--ro extr-acl-ext:acl-type?                -> /oc-acl:acl/acl-sets/acl-set/
type
               +--ro extr-acl-ext:acl-name?                -> /oc-acl:acl/acl-sets/acl-set/
name
               +--ro extr-acl-ext:acl-direction?           direction-enum
               +--ro extr-acl-ext:acl-seq-id?              -> /oc-acl:acl/acl-sets/acl-set/
acl-entries/acl-entry/sequence-id
               +--ro extr-acl-ext:feature-name?            string
               +--ro extr-acl-ext:feature-type?            feature-type-enum
               +--ro extr-acl-ext:feature-seq-id?          uint16
               +--ro extr-acl-ext:service-intf-index?      uint32
               +--ro extr-acl-ext:attachment-point-type?   attachment-point-type-enum

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
           +--rw members
              +--rw member* [interface]
                 +--rw interface    -> ../config/interface
                 +--rw config
                 |  +--rw interface?        oc-if:base-interface-ref
                 |  +--rw port-priority?   uint16
                 +--ro state
                    +--ro interface?                                 oc-if:base-
interface-ref
                    +--ro activity?                                  lacp-activity-
type
                    +--ro timeout?                                   lacp-timeout-type
                    +--ro synchronization?                           lacp-
synchronization-type
                    +--ro aggregatable?                              boolean
```

```
                        +--ro collecting?                                    boolean
                        +--ro distributing?                                  boolean
                        +--ro system-id?                                     oc-yang:mac-
address
                        +--ro oper-key?                                      uint16
                        +--ro partner-id?                                    oc-yang:mac-
address
                        +--ro partner-key?                                   uint16
                        +--ro port-num?                                      uint16
                        +--ro partner-port-num?                              uint16
                        +--ro last-change?                                   oc-
types:timeticks64
                        +--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 lacp-timeout-transitions? 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-network-instance
  +--rw network-instances
     +--rw network-instance* [name]
        +--rw name                              -> ../config/name
        +--rw config
        | +--rw name?                  string
        | +--rw type                   identityref
        | +--rw description?           string
        | +--rw router-id?             oc-yang:dotted-quad
        | +--rw route-distinguisher?   oc-ni-types:route-distinguisher
        | +--rw extr-ni-ext:resilient-hash?   boolean
        | +--rw extr-ni-ext:ecmp-max-path?    uint8
        | +--rw extr-ni-ext:sub-type?         identityref
        | +--rw extr-ni-ext:statistics?       boolean
        +--ro state
        | +--ro name?                  string
        | +--ro type                   identityref
        | +--ro description?           string
        | +--ro router-id?             oc-yang:dotted-quad
        | +--ro route-distinguisher?   oc-ni-types:route-distinguisher
        | +--ro extr-ni-ext:network-instance-id?  uint32
        | +--ro extr-ni-ext:resilient-hash?       boolean
```

```
          |  +--ro extr-ni-ext:ecmp-max-path?        uint8
          |  +--ro extr-ni-ext:sub-type?             identityref
          |  +--ro extr-ni-ext:statistics?           boolean
          |  +--ro extr-ni-ext:counters
          |     +--ro extr-ni-ext:in-octets?    oc-yang:counter64
          |     +--ro extr-ni-ext:in-pkts?      oc-yang:counter64
          |     +--ro extr-ni-ext:out-octets?   oc-yang:counter64
          |     +--ro extr-ni-ext:out-pkts?     oc-yang:counter64
          +--rw fdb
          |  +--rw config
          |  |  +--rw mac-learning?                       boolean
          |  |  +--rw mac-aging-time?                     uint16
          |  |  +--rw maximum-entries?                    uint16
          |  |  +--rw anycast-gateway-mac?                oc-yang:mac-address
          |  |  +--rw flood-unknown-unicast-supression?   boolean
          |  +--ro state
          |  |  +--ro mac-learning?                       boolean
          |  |  +--ro mac-aging-time?                     uint16
          |  |  +--ro maximum-entries?                    uint16
          |  |  +--ro anycast-gateway-mac?                oc-yang:mac-address
          |  |  +--ro flood-unknown-unicast-supression?   boolean
          |  +--rw mac-table
          |  |  +--rw entries
          |  |     +--rw entry* [mac-address vlan]
          |  |        +--rw mac-address    -> ../config/mac-address
          |  |        +--rw vlan           -> ../config/vlan
          |  |        +--rw config
          |  |        |  +--rw mac-address?   oc-yang:mac-address
          |  |        |  +--rw vlan?          -> ../../../../../../vlans/vlan/config/vlan-id
          |  |        +--ro state
          |  |        |  +--ro mac-address?   oc-yang:mac-address
          |  |        |  +--ro vlan?          -> ../../../../../../vlans/vlan/config/vlan-id
          |  |        +--rw interface
          |  |           +--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 mac-mobility
          |  |  +--rw config
          |  |  |  +--rw mac-mobility?                boolean
          |  |  |  +--rw mac-mobility-window?         uint16
          |  |  |  +--rw mac-mobility-threshold?      uint8
          |  |  |  +--rw ip-mobility-threshold?       uint16
          |  |  |  +--rw duplicate-ip-detection-interval?   uint16
          |  |  +--ro state
          |  |     +--ro mac-mobility?                boolean
          |  |     +--ro mac-mobility-window?         uint16
          |  |     +--ro mac-mobility-threshold?      uint8
          |  |     +--ro ip-mobility-threshold?       uint16
          |  |     +--ro duplicate-ip-detection-interval?   uint16
          |  +--rw arp-proxy
          |  |  +--rw config
          |  |  |  +--rw arp-suppression?             boolean
          |  |  |  +--rw extr-ni-ext:arp-snooping?    boolean
          |  |  |  +--rw extr-ni-ext:arp-agetime?     uint16
          |  |  +--ro state
          |  |     +--ro arp-suppression?             boolean
          |  |     +--ro extr-ni-ext:arp-snooping?    boolean
          |  |     +--ro extr-ni-ext:arp-agetime?     uint16
```

```
        |   +--rw nd-proxy
        |      +--rw config
        |      |  +--rw nd-suppression?           boolean
        |      |  +--rw extr-ni-ext:nd-snooping?  boolean
        |      |  +--rw extr-ni-ext:nd-agetime?   uint16
        |      +--ro state
        |         +--ro nd-suppression?           boolean
        |         +--ro extr-ni-ext:nd-snooping?  boolean
        |         +--ro extr-ni-ext:nd-agetime?   uint16
        +--rw evpn
        |  +--rw evpn-instances
        |     +--rw evpn-instance* [evi]
        |        +--rw evi                                -> ../config/evi
        |        +--rw config
        |        |  +--rw evi?                            string
        |        |  +--rw encapsulation-type?            identityref
        |        |  +--rw service-type?                  identityref
        |        |  +--rw multicast-group?               oc-inet:ip-address
        |        |  +--rw multicast-mask?                oc-inet:ip-address
        |        |  +--rw replication-mode?              enumeration
        |        |  +--rw route-distinguisher?           union
        |        |  +--rw extr-ni-evpn-ext:nve?          string
        |        |  +--rw extr-ni-evpn-ext:bridge-domain*  oc-ni:network-instance-ref
        |        |  +--rw extr-ni-evpn-ext:ignore-as?    boolean
        |        +--ro state
        |        |  +--ro evi?                           string
        |        |  +--ro encapsulation-type?            identityref
        |        |  +--ro service-type?                  identityref
        |        |  +--ro multicast-group?               oc-inet:ip-address
        |        |  +--ro multicast-mask?                oc-inet:ip-address
        |        |  +--ro replication-mode?              enumeration
        |        |  +--ro route-distinguisher?           union
        |        |  +--ro extr-ni-evpn-ext:nve?          string
        |        |  +--ro extr-ni-evpn-ext:bridge-domain*  oc-ni:network-instance-ref
        |        |  +--ro extr-ni-evpn-ext:ignore-as?    boolean
        |        |  +--ro extr-ni-evpn-ext:refresh-reason?  string
        |        |  +--ro extr-ni-evpn-ext:rd-auto?      boolean
        |        |  +--ro extr-ni-evpn-ext:import-rt-auto?  boolean
        |        |  +--ro extr-ni-evpn-ext:export-rt-auto?  boolean
        |        |  +--ro extr-ni-evpn-ext:tunnel-src?   string
        |        |  +--ro extr-ni-evpn-ext:router-id?    string
        |        |  +--ro extr-ni-evpn-ext:active?       boolean
        |        +--rw import-export-policy
        |        |  +--rw config
        |        |  |  +--rw export-route-target*   union
        |        |  |  +--rw import-route-target*   union
        |        |  +--ro state
        |        |     +--ro export-route-target*   union
        |        |     +--ro import-route-target*   union
        |        +--rw vxlan
        |        |  +--rw config
        |        |  |  +--rw vni?                               oc-evpn-types:vni-id
        |        |  |  +--rw overlay-endpoint-network-instance?  -> /network-instances/
network-instance/name
        |        |  |  +--rw overlay-endpoint?                   -> /network-instances/
network-instance[name=current()/../overlay-endpoint-network-instance]/connection-points/
connection-point/endpoints/endpoint/config/endpoint-id
        |        |  |  +--rw host-reachability-bgp?             boolean
        |        |  |  +--rw multicast-group?                   oc-inet:ip-address
        |        |  |  +--rw multicast-mask?                    oc-inet:ip-address
        |        |  +--ro state
        |        |  |  +--ro vni?                               oc-evpn-types:vni-id
        |        |  |  +--ro overlay-endpoint-network-instance?  -> /network-instances/
network-instance/name
```

```
|           |   |  +--ro overlay-endpoint?                        -> /network-instances/
network-instance[name=current()/../overlay-endpoint-network-instance]/connection-points/
connection-point/endpoints/endpoint/config/endpoint-id
|           |   |  +--ro host-reachability-bgp?           boolean
|           |   |  +--ro multicast-group?                 oc-inet:ip-address
|           |   |  +--ro multicast-mask?                  oc-inet:ip-address
|           |   +--rw anycast-source-interface
|           |      +--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 pbb
|              |  +--rw b-component* [b-component-name]
|              |     +--rw b-component-name    -> ../config/b-component-name
|              |     +--rw config
|              |     |  +--rw b-component-name?   string
|              |     |  +--rw backbone-src-mac?   oc-yang:mac-address
|              |     +--ro state
|              |     |  +--ro b-component-name?   string
|              |     |  +--ro backbone-src-mac?   oc-yang:mac-address
|              |     +--rw i-components
|              |        +--rw i-component* [i-sid]
|              |           +--rw i-sid     -> ../config/i-sid
|              |           +--rw config
|              |           |  +--rw i-sid?   uint32
|              |           +--ro state
|              |              +--ro i-sid?   uint32
|              +--rw extr-ni-evpn-ext:duplicate-host-detection
|              |  +--rw extr-ni-evpn-ext:mac-detection
|              |  |  +--rw extr-ni-evpn-ext:config
|              |  |  |  +--rw extr-ni-evpn-ext:move-count?       uint32
|              |  |  |  +--rw extr-ni-evpn-ext:detection-time?   uint32
|              |  |  |  +--rw extr-ni-evpn-ext:dampening-time?   uint32
|              |  |  +--ro extr-ni-evpn-ext:state
|              |  |     +--ro extr-ni-evpn-ext:move-count?       uint32
|              |  |     +--ro extr-ni-evpn-ext:detection-time?   uint32
|              |  |     +--ro extr-ni-evpn-ext:dampening-time?   uint32
|              |  +--rw extr-ni-evpn-ext:ipv4-detection
|              |  |  +--rw extr-ni-evpn-ext:config
|              |  |  |  +--rw extr-ni-evpn-ext:move-count?       uint32
|              |  |  |  +--rw extr-ni-evpn-ext:detection-time?   uint32
|              |  |  |  +--rw extr-ni-evpn-ext:dampening-time?   uint32
|              |  |  +--ro extr-ni-evpn-ext:state
|              |  |     +--ro extr-ni-evpn-ext:move-count?       uint32
|              |  |     +--ro extr-ni-evpn-ext:detection-time?   uint32
|              |  |     +--ro extr-ni-evpn-ext:dampening-time?   uint32
|              |  +--rw extr-ni-evpn-ext:ipv6-detection
|              |     +--rw extr-ni-evpn-ext:config
|              |     |  +--rw extr-ni-evpn-ext:move-count?       uint32
|              |     |  +--rw extr-ni-evpn-ext:detection-time?   uint32
|              |     |  +--rw extr-ni-evpn-ext:dampening-time?   uint32
|              |     +--ro extr-ni-evpn-ext:state
|              |        +--ro extr-ni-evpn-ext:move-count?       uint32
|              |        +--ro extr-ni-evpn-ext:detection-time?   uint32
|              |        +--ro extr-ni-evpn-ext:dampening-time?   uint32
|              +--ro extr-ni-evpn-ext:bridge-domains
|                 +--ro extr-ni-evpn-ext:bridge-domain* [bd-id]
|                    +--ro extr-ni-evpn-ext:bd-id    -> ../state/bd-id
|                    +--ro extr-ni-evpn-ext:state
|                       +--ro extr-ni-evpn-ext:bd-id?    uint32
```

```
            |                  +--ro extr-ni-evpn-ext:active?   boolean
            |                  +--ro extr-ni-evpn-ext:name?      string
            |                  +--ro extr-ni-evpn-ext:linked?   boolean
        +--rw table-connections
        |  +--rw table-connection* [src-protocol dst-protocol address-family]
        |     +--rw src-protocol      -> ../config/src-protocol
        |     +--rw dst-protocol      -> ../config/dst-protocol
        |     +--rw address-family    -> ../config/address-family
        |     +--rw config
        |     |  +--rw src-protocol?                 -> ../../../../tables/table/config/
protocol
        |     |  +--rw address-family?               -> ../../../../tables/
table[protocol=current()/../src-protocol]/config/address-family
        |     |  +--rw dst-protocol?                 -> ../../../../tables/table/config/
protocol
        |     |  +--rw disable-metric-propagation?   boolean
        |     |  +--rw import-policy*                -> /oc-rpol:routing-policy/policy-
definitions/policy-definition/name
        |     |  +--rw default-import-policy?        default-policy-type
        |     +--ro state
        |        +--ro src-protocol?                 -> ../../../../tables/table/config/
protocol
        |        +--ro address-family?               -> ../../../../tables/
table[protocol=current()/../src-protocol]/config/address-family
        |        +--ro dst-protocol?                 -> ../../../../tables/table/config/
protocol
        |        +--ro disable-metric-propagation?   boolean
        |        +--ro import-policy*                -> /oc-rpol:routing-policy/policy-
definitions/policy-definition/name
        |        +--ro default-import-policy?        default-policy-type
        +--rw interfaces
        |  +--rw interface* [id]
        |     +--rw id         -> ../config/id
        |     +--rw config
        |     |  +--rw id?            oc-if:interface-id
        |     |  +--rw interface?     -> /oc-if:interfaces/interface/name
        |     |  +--rw subinterface?  -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
        |     +--ro state
        |        +--ro id?            oc-if:interface-id
        |        +--ro interface?     -> /oc-if:interfaces/interface/name
        |        +--ro subinterface?  -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
        +--rw tables
        |  +--rw table* [protocol address-family]
        |     +--rw protocol          -> ../config/protocol
        |     +--rw address-family    -> ../config/address-family
        |     +--rw config
        |     |  +--rw protocol?        -> ../../../../protocols/protocol/config/
identifier
        |     |  +--rw address-family?   identityref
        |     +--ro state
        |        +--ro protocol?        -> ../../../../protocols/protocol/config/
identifier
        |        +--ro address-family?   identityref
        +--rw connection-points
        |  +--rw connection-point* [connection-point-id]
        |     +--rw connection-point-id    -> ../config/connection-point-id
        |     +--rw config
        |     |  +--rw connection-point-id?   string
        |     +--ro state
        |     |  +--ro connection-point-id?   string
        |     +--rw endpoints
        |        +--rw endpoint* [endpoint-id]
```

```
|                   +--rw endpoint-id    -> ../config/endpoint-id
|                   +--rw config
|                   | +--rw endpoint-id?    string
|                   | +--rw precedence?     uint16
|                   | +--rw type?           identityref
|                   +--ro state
|                   | +--ro endpoint-id?    string
|                   | +--ro precedence?     uint16
|                   | +--ro type?           identityref
|                   | +--ro active?         boolean
|                   +--rw local
|                   | +--rw config
|                   | | +--rw interface?                  -> /oc-if:interfaces/interface/
name
|                   | | +--rw subinterface?               -> /oc-if:interfaces/
interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/index
|                   | | +--rw site-id?                  uint16
|                   | | +--rw site-label-block-offset?   uint16
|                   | | +--rw site-label-block-size?     uint16
|                   | +--ro state
|                   |   +--ro interface?                  -> /oc-if:interfaces/interface/
name
|                   |   +--ro subinterface?               -> /oc-if:interfaces/
interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/index
|                   |   +--ro site-id?                  uint16
|                   |   +--ro site-label-block-offset?   uint16
|                   |   +--ro site-label-block-size?     uint16
|                   +--rw remote
|                   | +--rw config
|                   | | +--rw remote-system?               oc-inet:ip-address
|                   | | +--rw virtual-circuit-identifier?   uint32
|                   | | +--rw site-id?                      uint16
|                   | +--ro state
|                   |   +--ro remote-system?               oc-inet:ip-address
|                   |   +--ro virtual-circuit-identifier?   uint32
|                   |   +--ro site-id?                      uint16
|                   +--rw vxlan
|                      +--rw config
|                      | +--rw description?        string
|                      | +--rw enabled?            boolean
|                      | +--rw source-interface?   string
|                      +--ro state
|                      | +--ro description?        string
|                      | +--ro enabled?            boolean
|                      | +--ro source-interface?   string
|                      +--ro endpoint-peers
|                      | +--ro endpoint-peer* [peer-address]
|                      |    +--ro peer-address     -> ../state/peer-address
|                      |    +--ro state
|                      |       +--ro peer-address?         oc-inet:ip-address
|                      |       +--ro peer-state?           enumeration
|                      |       +--ro uptime?               oc-types:timeticks64
|                      |       x--ro control-plane-vnis*   oc-evpn-types:vni-id
|                      |       x--ro router-mac?           oc-yang:mac-address
|                      +--ro endpoint-vnis
|                         +--ro endpoint-vni* [vni]
|                            +--ro vni      -> ../state/vni
|                            +--ro state
|                               +--ro vni?                        oc-evpn-types:evi-id
|                               +--ro vni-type?                   enumeration
|                               +--ro bridge-domain?              uint32
|                               +--ro l3-vrf-name?                string
|                               +--ro multidestination-traffic?   union
|                               +--ro learning-mode?              oc-evpn-types:learning-
```

```
mode
          |                           +--ro vni-state?                     enumeration
          |                           +--ro svi-state?                     enumeration
          +--rw vlans
          |  +--rw vlan* [vlan-id]
          |     +--rw vlan-id    -> ../config/vlan-id
          |     +--rw config
          |     |  +--rw vlan-id?   oc-vlan-types:vlan-id
          |     +--ro state
          |     |  +--ro vlan-id?   oc-vlan-types:vlan-id
          |     +--rw members
          |        +--ro member* []
          |           +--ro state
          |              +--ro interface?   base-interface-ref
          +--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
          |     |  +--rw extr-ni-ext:default-distance?  uint32
          |     +--ro state
          |     |  +--ro identifier?                   identityref
          |     |  +--ro name?                         string
          |     |  +--ro enabled?                      boolean
          |     |  +--ro default-metric?               uint32
          |     |  +--ro extr-ni-ext:default-distance?  uint32
          |     +--rw static-routes
          |     |  +--rw static* [prefix]
          |     |     +--rw prefix        -> ../config/prefix
          |     |     +--rw config
          |     |     |  +--rw prefix?        inet:ip-prefix
          |     |     |  +--rw set-tag?       uint32
          |     |     |  +--rw description?   string
          |     |     +--ro state
          |     |     |  +--ro prefix?        inet:ip-prefix
          |     |     |  +--ro set-tag?       uint32
          |     |     |  +--ro description?   string
          |     |     +--rw next-hops
          |     |        +--rw next-hop* [index]
          |     |           +--rw index              -> ../config/index
          |     |           +--rw config
          |     |           |  +--rw index?                       string
          |     |           |  +--rw next-hop?                    union
          |     |           |  +--rw recurse?                     boolean
          |     |           |  +--rw metric?                      uint32
          |     |           |  +--rw preference?                  uint32
          |     |           |  +--rw extr-ni-ext:admin-distance?  uint32
          |     |           +--ro state
          |     |           |  +--ro index?                       string
          |     |           |  +--ro next-hop?                    union
          |     |           |  +--ro recurse?                     boolean
          |     |           |  +--ro metric?                      uint32
          |     |           |  +--ro preference?                  uint32
          |     |           |  +--ro extr-ni-ext:admin-distance?  uint32
          |     |           +--rw enable-bfd
          |     |           |  +--rw config
          |     |           |  |  +--rw enabled?                          boolean
          |     |           |  |  +--rw extr-bfd-ext:profile?             profile-ref
          |     |           |  |  +--rw extr-static-bfd-ext:source-interface?  oc-if:base-
interface-ref
```

```
|      |              |  +--ro state
|      |              |     +--ro enabled?                                boolean
|      |              |     +--ro extr-bfd-ext:profile?                    profile-
ref
|      |              |     +--ro extr-static-bfd-ext:session-id?          uint32
|      |              |     +--ro extr-static-bfd-ext:session-status?      uint8
|      |              |     +--ro extr-static-bfd-ext:last-updated?        oc-
types:timeticks64
|      |              |     +--ro extr-static-bfd-ext:source-addr?         oc-
inet:ip-address
|      |              |     +--ro extr-static-bfd-ext:source-subinterface? uint64
|      |              |     +--ro extr-static-bfd-ext:source-interface?    oc-
if:base-interface-ref
|      |              +--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 bgp
|           +--rw global
|           |  +--rw config
|           |  |  +--rw as                            oc-inet:as-number
|           |  |  +--rw router-id?                    oc-yang:dotted-quad
|           |  |  +--rw extr-bgp-ext:as-notation?     extr-bgp-types:as-
notation-type
|           |  |  +--rw extr-bgp-ext:route-distinguisher?  oc-ni-types:route-
distinguisher
|           |  +--ro state
|           |  |  +--ro as                            oc-inet:as-number
|           |  |  +--ro router-id?                    oc-yang:dotted-quad
|           |  |  +--ro total-paths?                  uint32
|           |  |  +--ro total-prefixes?               uint32
|           |  |  +--ro extr-bgp-ext:as-notation?     extr-bgp-types:as-
notation-type
|           |  |  +--ro extr-bgp-ext:route-distinguisher?  oc-ni-types:route-
distinguisher
|           |  +--rw confederation
|           |  |  +--rw config
|           |  |  |  +--rw identifier?   oc-inet:as-number
|           |  |  |  +--rw member-as*    oc-inet:as-number
|           |  |  +--ro state
|           |  |     +--ro identifier?   oc-inet:as-number
|           |  |     +--ro member-as*    oc-inet:as-number
|           |  +--rw graceful-restart
|           |  |  +--rw config
|           |  |  |  +--rw enabled?            boolean
|           |  |  |  +--rw restart-time?       uint16
|           |  |  |  +--rw stale-routes-time?  uint16
|           |  |  |  +--rw helper-only?        boolean
|           |  |  +--ro state
|           |  |     +--ro enabled?            boolean
|           |  |     +--ro restart-time?       uint16
|           |  |     +--ro stale-routes-time?  uint16
|           |  |     +--ro helper-only?        boolean
|           |  +--rw use-multiple-paths
|           |  |  +--rw config
|           |  |  |  +--rw enabled?   boolean
|           |  |  +--ro state
|           |  |  |  +--ro enabled?   boolean
|           |  |  +--rw ebgp
```

```
|           |  |  | +--rw config
|           |  |  | | +--rw allow-multiple-as?   boolean
|           |  |  | | +--rw maximum-paths?       uint32
|           |  |  | +--ro state
|           |  |  |    +--ro allow-multiple-as?   boolean
|           |  |  |    +--ro maximum-paths?       uint32
|           |  +--rw ibgp
|           |  |     +--rw config
|           |  |     | +--rw maximum-paths?   uint32
|           |  |     +--ro state
|           |  |        +--ro maximum-paths?   uint32
|           +--rw afi-safis
|           |  +--rw afi-safi* [afi-safi-name]
|           |     +--rw afi-safi-name                                -> ../
config/afi-safi-name
|           |     +--rw config
|           |     | +--rw afi-safi-name?   identityref
|           |     | +--rw enabled?         boolean
|           |     +--ro state
|           |     | +--ro afi-safi-name?   identityref
|           |     | +--ro enabled?         boolean
|           |     | +--ro total-paths?     uint32
|           |     | +--ro total-prefixes?  uint32
|           |     +--rw graceful-restart
|           |     | +--rw config
|           |     | | +--rw enabled?   boolean
|           |     | +--ro state
|           |     |    +--ro enabled?   boolean
|           |     +--rw use-multiple-paths
|           |     | +--rw config
|           |     | | +--rw enabled?   boolean
|           |     | +--ro state
|           |     | | +--ro enabled?   boolean
|           |     | +--rw ebgp
|           |     | | +--rw config
|           |     | | | +--rw allow-multiple-as?   boolean
|           |     | | | +--rw maximum-paths?       uint32
|           |     | | +--ro state
|           |     | |    +--ro allow-multiple-as?   boolean
|           |     | |    +--ro maximum-paths?       uint32
|           |     | +--rw ibgp
|           |     |    +--rw config
|           |     |    | +--rw maximum-paths?   uint32
|           |     |    +--ro state
|           |     |       +--ro maximum-paths?   uint32
|           |     +--rw add-paths
|           |     | +--rw config
|           |     | | +--rw receive?   boolean
|           |     | +--ro state
|           |     |    +--ro receive?   boolean
|           |     +--rw ipv4-unicast
|           |     | +--rw config
|           |     | | +--rw send-default-route?                     boolean
|           |     | | +--rw extr-bgp-ext:next-hop-recursion?        boolean
|           |     | | +--rw extr-bgp-ext:next-hop-enable-default?   boolean
|           |     | +--ro state
|           |     |    +--ro send-default-route?                     boolean
|           |     |    +--ro extr-bgp-ext:next-hop-recursion?        boolean
|           |     |    +--ro extr-bgp-ext:next-hop-enable-default?   boolean
|           |     +--rw ipv6-unicast
|           |     | +--rw config
|           |     | | +--rw send-default-route?                     boolean
|           |     | | +--rw extr-bgp-ext:next-hop-recursion?        boolean
|           |     | | +--rw extr-bgp-ext:next-hop-enable-default?   boolean
```

```
|           |   |   |   +--ro state
|           |   |   |      +--ro send-default-route?                     boolean
|           |   |   |      +--ro extr-bgp-ext:next-hop-recursion?        boolean
|           |   |   |      +--ro extr-bgp-ext:next-hop-enable-default?   boolean
|           |   |   +--rw l2vpn-evpn
|           |   |   |   +--rw extr-bgp-ext:config
|           |   |   |   |   +--rw extr-bgp-ext:retain-route-target-all?   boolean
|           |   |   |   +--rw extr-bgp-ext:state
|           |   |   |      +--rw extr-bgp-ext:retain-route-target-all?   boolean
|           |   |   +--rw extr-bgp-ext:prefix-independent-convergence
|           |   |   |   +--rw extr-bgp-ext:config
|           |   |   |   |   +--rw extr-bgp-ext:enabled?   boolean
|           |   |   |   +--ro extr-bgp-ext:state
|           |   |   |      +--ro extr-bgp-ext:enabled?   boolean
|           |   |   +--rw extr-bgp-ext:network* [prefix]
|           |   |      +--rw extr-bgp-ext:prefix    -> ../config/prefix
|           |   |      +--rw extr-bgp-ext:config
|           |   |      |   +--rw extr-bgp-ext:prefix?   oc-inet:ip-prefix
|           |   |      |   +--rw extr-bgp-ext:policy?   string
|           |   |      +--ro extr-bgp-ext:state
|           |   |         +--ro extr-bgp-ext:prefix?   oc-inet:ip-prefix
|           |   |         +--ro extr-bgp-ext:policy?   string
|           |   +--rw dynamic-neighbor-prefixes
|           |   |   +--rw dynamic-neighbor-prefix* [prefix]
|           |   |      +--rw prefix    -> ../config/prefix
|           |   |      +--rw config
|           |   |      |   +--rw prefix?                      oc-inet:ip-prefix
|           |   |      |   +--rw peer-group?                  -> ../../../../../peer-
groups/peer-group/config/peer-group-name
|           |   |      |   +--rw extr-bgp-ext:listen-limit?   uint16
|           |   |      +--ro state
|           |   |         +--ro prefix?                      oc-inet:ip-prefix
|           |   |         +--ro peer-group?                  -> ../../../../../peer-
groups/peer-group/config/peer-group-name
|           |   |         +--ro extr-bgp-ext:listen-limit?   uint16
|           |   +--rw extr-bgp-ext:evpn
|           |      +--rw extr-bgp-ext:nves
|           |         +--rw extr-bgp-ext:nve* [name]
|           |            +--rw extr-bgp-ext:name         -> ../config/name
|           |            +--rw extr-bgp-ext:config
|           |            |   +--rw extr-bgp-ext:name?    string
|           |            |   +--rw extr-bgp-ext:l3vni?   uint32
|           |            +--ro extr-bgp-ext:state
|           |            |   +--ro extr-bgp-ext:name?    string
|           |            |   +--ro extr-bgp-ext:l3vni?   uint32
|           |            +--rw extr-bgp-ext:afi-safis
|           |               +--rw extr-bgp-ext:afi-safi* [afi-safi-name]
|           |                  +--rw extr-bgp-ext:afi-safi-name         -> ../
config/afi-safi-name
|           |                  +--rw extr-bgp-ext:config
|           |                  |   +--rw extr-bgp-ext:afi-safi-name?   identityref
|           |                  |   +--rw extr-bgp-ext:ignore-as?       boolean
|           |                  +--ro extr-bgp-ext:state
|           |                  |   +--ro extr-bgp-ext:afi-safi-name?   identityref
|           |                  |   +--ro extr-bgp-ext:ignore-as?       boolean
|           |                  +--rw extr-bgp-ext:import-export-policy
|           |                     +--rw extr-bgp-ext:config
|           |                     |   +--rw extr-bgp-ext:export-route-target*   union
|           |                     |   +--rw extr-bgp-ext:import-route-target*   union
|           |                     +--ro extr-bgp-ext:state
|           |                        +--ro extr-bgp-ext:export-route-target*   union
|           |                        +--ro extr-bgp-ext:import-route-target*   union
|           +--rw neighbors
|           |   +--rw neighbor* [neighbor-address]
```

```
      |          |          +--rw neighbor-address    -> ../config/neighbor-address
      |          |          +--rw config
      |          |          |  +--rw peer-group?                     -> ../../../../peer-groups/
peer-group/peer-group-name
      |          |          |  +--rw neighbor-address?        oc-inet:ip-address
      |          |          |  +--rw neighbor-port?           oc-inet:port-number
      |          |          |  +--rw peer-as?                 oc-inet:as-number
      |          |          |  +--rw description?             string
      |          |          |  +--rw extr-bgp-ext:admin-down?  boolean
      |          |          +--ro state
      |          |          |  +--ro peer-group?
-> ../../../../peer-groups/peer-group/peer-group-name
      |          |          |  +--ro neighbor-address?                            oc-
inet:ip-address
      |          |          |  +--ro neighbor-port?                               oc-
inet:port-number
      |          |          |  +--ro peer-as?                                     oc-
inet:as-number
      |          |          |  +--ro local-as?                                    oc-
inet:as-number
      |          |          |  +--ro session-state?
enumeration
      |          |          |  +--ro last-established?                            oc-
types:timeticks64
      |          |          |  +--ro established-transitions?                     oc-
yang:counter64
      |          |          |  +--ro supported-capabilities*
identityref
      |          |          |  +--ro messages
      |          |          |  |  +--ro sent
      |          |          |  |  |  +--ro UPDATE?                         uint64
      |          |          |  |  |  +--ro NOTIFICATION?                   uint64
      |          |          |  |  |  +--ro last-notification-time?         oc-
types:timeticks64
      |          |          |  |  |  +--ro last-notification-error-code?    identityref
      |          |          |  |  |  +--ro last-notification-error-subcode? identityref
      |          |          |  |  +--ro received
      |          |          |  |     +--ro UPDATE?                         uint64
      |          |          |  |     +--ro NOTIFICATION?                   uint64
      |          |          |  |     +--ro last-notification-time?         oc-
types:timeticks64
      |          |          |  |     +--ro last-notification-error-code?    identityref
      |          |          |  |     +--ro last-notification-error-subcode? identityref
      |          |          |  +--ro dynamically-configured?                      boolean
      |          |          |  +--ro extr-bgp-ext:router-id?                      oc-
yang:dotted-quad
      |          |          |  +--ro extr-bgp-ext:admin-down?                     boolean
      |          |          |  +--ro extr-bgp-ext:advertised-capabilities*
identityref
      |          |          |  +--ro extr-bgp-ext:received-capabilities*
identityref
      |          |          |  +--ro extr-bgp-ext:negotiated-capabilities*
identityref
      |          |          |  +--ro extr-bgp-ext:advertised-afi-safi-capabilities?  string
      |          |          |  +--ro extr-bgp-ext:received-afi-safi-capabilities?    string
      |          |          |  +--ro extr-bgp-ext:negotiated-afi-safi-capabilities?  string
      |          |          +--rw timers
      |          |          |  +--rw config
      |          |          |  |  +--rw connect-retry?                  uint16
      |          |          |  |  +--rw hold-time?                      uint16
      |          |          |  |  +--rw keepalive-interval?             uint16
      |          |          |  |  +--rw minimum-advertisement-interval? uint16
      |          |          |  +--ro state
      |          |          |     +--ro connect-retry?                       uint16
```

```
|          |          |          +--ro hold-time?                                    uint16
|          |          |          +--ro keepalive-interval?                           uint16
|          |          |          +--ro negotiated-hold-time?                         uint16
|          |          |          +--ro extr-bgp-ext:remaining-keepalive?        oc-
types:timeticks64
|          |          |          +--ro extr-bgp-ext:remaining-holdtime?         oc-
types:timeticks64
|          |          |          +--ro extr-bgp-ext:remaining-connect-retry?    oc-
types:timeticks64
|          |          +--rw transport
|          |          | +--rw config
|          |          | | +--rw local-address?    union
|          |          | +--ro state
|          |          |    +--ro local-address?                         union
|          |          |    +--ro local-port?                            oc-inet:port-number
|          |          |    +--ro remote-port?                           oc-inet:port-number
|          |          |    +--ro extr-bgp-ext:alt-local-address?    union
|          |          +--rw graceful-restart
|          |          | +--rw config
|          |          | | +--rw enabled?             boolean
|          |          | | +--rw restart-time?        uint16
|          |          | | +--rw stale-routes-time?   uint16
|          |          | | +--rw helper-only?         boolean
|          |          | +--ro state
|          |          |    +--ro enabled?                                boolean
|          |          |    +--ro restart-time?                           uint16
|          |          |    +--ro stale-routes-time?                      uint16
|          |          |    +--ro helper-only?                            boolean
|          |          |    +--ro peer-restart-time?                      uint16
|          |          |    +--ro peer-restarting?                        boolean
|          |          |    +--ro local-restarting?                       boolean
|          |          |    +--ro extr-bgp-ext:peer-restart-timer-start-time?   oc-
types:timeticks64
|          |          |    +--ro extr-bgp-ext:stale-routes-timer-start-time?   oc-
types:timeticks64
|          |          +--rw ebgp-multihop
|          |          | +--rw config
|          |          | | +--rw enabled?        boolean
|          |          | | +--rw multihop-ttl?   uint8
|          |          | +--ro state
|          |          |    +--ro enabled?        boolean
|          |          |    +--ro multihop-ttl?   uint8
|          |          +--rw afi-safis
|          |          | +--rw afi-safi* [afi-safi-name]
|          |          |    +--rw afi-safi-name       -> ../config/afi-safi-name
|          |          |    +--rw config
|          |          |    | +--rw afi-safi-name?   identityref
|          |          |    +--ro state
|          |          |    | +--ro afi-safi-name?   identityref
|          |          |    | +--ro enabled?         boolean
|          |          |    | +--ro active?          boolean
|          |          |    | +--ro prefixes
|          |          |    |    +--ro received?   uint32
|          |          |    |    +--ro sent?       uint32
|          |          |    +--rw graceful-restart
|          |          |    | +--rw config
|          |          |    | | +--rw enabled?   boolean
|          |          |    | +--ro state
|          |          |    |    +--ro enabled?                   boolean
|          |          |    |    +--ro received?                  boolean
|          |          |    |    +--ro advertised?                boolean
|          |          |    |    +--ro extr-bgp-ext:eor-sent?       boolean
|          |          |    |    +--ro extr-bgp-ext:eor-received?   boolean
|          |          |    +--rw add-paths
```

```
|       |       |           +--ro state
|       |       |              +--ro receive?                    boolean
|       |       |              +--ro send?                       boolean
|       |       |              +--ro extr-bgp-ext:peer-receive?  boolean
|       |       |              +--ro extr-bgp-ext:peer-send?     boolean
|       |   +--rw enable-bfd
|       |      +--rw config
|       |      |  +--rw enabled?                 boolean
|       |      |  +--rw extr-bfd-ext:profile?    profile-ref
|       |      +--ro state
|       |         +--ro enabled?                             boolean
|       |         +--ro extr-bfd-ext:profile?                profile-ref
|       |         +--ro extr-bfd-ext:session-Id?             uint32
|       |         +--ro extr-bfd-ext:vrf-Id?                 uint32
|       |         +--ro extr-bfd-ext:source-Ip?              oc-inet:ip-prefix
|       |         +--ro extr-bfd-ext:destination-Ip?         oc-inet:ip-prefix
|       |         +--ro extr-bfd-ext:registration-status?    boolean
|       |         +--ro extr-bfd-ext:session-status?         uint8
|       |         +--ro extr-bfd-ext:status-code?            uint8
|       |         +--ro extr-bfd-ext:time-stamp?             oc-
types:timeticks64
|          +--rw peer-groups
|          |  +--rw peer-group* [peer-group-name]
|          |     +--rw peer-group-name            -> ../config/peer-group-name
|          |     +--rw config
|          |     |  +--rw peer-group-name?                     string
|          |     |  +--rw peer-as?                             oc-inet:as-number
|          |     |  +--rw local-as?                            oc-inet:as-number
|          |     |  +--rw peer-type?                           oc-bgp-types:peer-
type
|          |     |  +--rw auth-password?                       oc-types:routing-
password
|          |     |  +--rw description?                         string
|          |     |  +--rw extr-bgp-ext:admin-down?             boolean
|          |     |  +--rw extr-bgp-ext:peer-group-af-type?     identityref
|          |     |  +--rw extr-bgp-ext:nvo?                    string
|          |     |  +--rw extr-bgp-ext:local-as-forced?        uint16
|          |     |  +--rw extr-bgp-ext:fast-external-failover? boolean
|          |     +--ro state
|          |     |  +--ro peer-group-name?                     string
|          |     |  +--ro peer-as?                             oc-inet:as-number
|          |     |  +--ro auth-password?                       oc-types:routing-
password
|          |     |  +--ro description?                         string
|          |     |  +--ro extr-bgp-ext:admin-down?             boolean
|          |     |  +--ro extr-bgp-ext:peer-group-af-type?     identityref
|          |     |  +--ro extr-bgp-ext:nvo?                    string
|          |     |  +--ro extr-bgp-ext:local-as-forced?        uint16
|          |     |  +--ro extr-bgp-ext:fast-external-failover? boolean
|          |     +--rw timers
|          |     |  +--rw config
|          |     |  |  +--rw connect-retry?        uint16
|          |     |  |  +--rw hold-time?            uint16
|          |     |  |  +--rw keepalive-interval?   uint16
|          |     |  +--ro state
|          |     |     +--ro connect-retry?        uint16
|          |     |     +--ro hold-time?            uint16
|          |     |     +--ro keepalive-interval?   uint16
|          |     +--rw transport
|          |     |  +--rw config
|          |     |  |  +--rw local-address?   union
|          |     |  +--ro state
|          |     |     +--ro local-address?   union
|          |     +--rw graceful-restart
```

```
        |         |   |  +--rw config
        |         |   |  |  +--rw enabled?            boolean
        |         |   |  |  +--rw restart-time?       uint16
        |         |   |  |  +--rw stale-routes-time?  uint16
        |         |   |  |  +--rw helper-only?        boolean
        |         |   |  +--ro state
        |         |   |     +--ro enabled?            boolean
        |         |   |     +--ro restart-time?       uint16
        |         |   |     +--ro stale-routes-time?  uint16
        |         |   |     +--ro helper-only?        boolean
        |         |   +--rw ebgp-multihop
        |         |   |  +--rw config
        |         |   |  |  +--rw enabled?        boolean
        |         |   |  |  +--rw multihop-ttl?   uint8
        |         |   |  +--ro state
        |         |   |     +--ro enabled?        boolean
        |         |   |     +--ro multihop-ttl?   uint8
        |         |   +--rw route-reflector
        |         |   |  +--rw config
        |         |   |  |  +--rw route-reflector-cluster-id?   oc-bgp-types:rr-cluster-
id-type
        |         |   |  |  +--rw route-reflector-client?       boolean
        |         |   |  +--ro state
        |         |   |     +--ro route-reflector-cluster-id?   oc-bgp-types:rr-cluster-
id-type
        |         |   |     +--ro route-reflector-client?       boolean
        |         |   +--rw as-path-options
        |         |   |  +--rw config
        |         |   |  |  +--rw allow-own-as?           uint8
        |         |   |  |  +--rw disable-peer-as-filter?   boolean
        |         |   |  +--ro state
        |         |   |     +--ro allow-own-as?           uint8
        |         |   |     +--ro disable-peer-as-filter?   boolean
        |         |   +--rw use-multiple-paths
        |         |   |  +--rw config
        |         |   |  |  +--rw enabled?   boolean
        |         |   |  +--ro state
        |         |   |  |  +--ro enabled?   boolean
        |         |   |  +--rw ebgp
        |         |   |     +--rw config
        |         |   |     |  +--rw allow-multiple-as?   boolean
        |         |   |     |  +--rw maximum-paths?       uint32
        |         |   |     +--ro state
        |         |   |        +--ro allow-multiple-as?   boolean
        |         |   |        +--ro maximum-paths?       uint32
        |         |   +--rw apply-policy
        |         |   |  +--rw config
        |         |   |  |  +--rw import-policy*   -> /oc-rpol:routing-policy/policy-
definitions/policy-definition/name
        |         |   |  |  +--rw export-policy*   -> /oc-rpol:routing-policy/policy-
definitions/policy-definition/name
        |         |   |  +--ro state
        |         |   |     +--ro import-policy*   -> /oc-rpol:routing-policy/policy-
definitions/policy-definition/name
        |         |   |     +--ro export-policy*   -> /oc-rpol:routing-policy/policy-
definitions/policy-definition/name
        |         |   +--rw afi-safis
        |         |   |  +--rw afi-safi* [afi-safi-name]
        |         |   |     +--rw afi-safi-name      -> ../config/afi-safi-name
        |         |   |     +--rw config
        |         |   |     |  +--rw afi-safi-name?                    identityref
        |         |   |     |  +--rw enabled?                          boolean
        |         |   |     |  +--rw extr-bgp-ext:nexthop-self?        boolean
        |         |   |     |  +--rw extr-bgp-ext:nexthop-unchanged?   boolean
```

```
            |       |       |         +--ro state
            |       |       |         | +--ro afi-safi-name?                      identityref
            |       |       |         | +--ro enabled?                            boolean
            |       |       |         | +--ro extr-bgp-ext:nexthop-self?          boolean
            |       |       |         | +--ro extr-bgp-ext:nexthop-unchanged?     boolean
            |       |       |         +--rw graceful-restart
            |       |       |         | +--rw config
            |       |       |         | | +--rw enabled?   boolean
            |       |       |         | +--ro state
            |       |       |         |    +--ro enabled?   boolean
            |       |       |         +--rw add-paths
            |       |       |         | +--rw config
            |       |       |         | | +--rw receive?   boolean
            |       |       |         | +--ro state
            |       |       |         |    +--ro receive?   boolean
            |       |       |         +--rw apply-policy
            |       |       |         | +--rw config
            |       |       |         | | +--rw import-policy*   -> /oc-rpol:routing-policy/
policy-definitions/policy-definition/name
            |       |       |         | | +--rw export-policy*   -> /oc-rpol:routing-policy/
policy-definitions/policy-definition/name
            |       |       |         | +--ro state
            |       |       |         |    +--ro import-policy*   -> /oc-rpol:routing-policy/
policy-definitions/policy-definition/name
            |       |       |         |    +--ro export-policy*   -> /oc-rpol:routing-policy/
policy-definitions/policy-definition/name
            |       |       |         +--rw ipv4-unicast
            |       |       |         | +--rw config
            |       |       |         | | +--rw send-default-route?   boolean
            |       |       |         | +--ro state
            |       |       |         |    +--ro send-default-route?   boolean
            |       |       |         +--rw ipv6-unicast
            |       |       |         | +--rw config
            |       |       |         | | +--rw send-default-route?   boolean
            |       |       |         | +--ro state
            |       |       |         |    +--ro send-default-route?   boolean
            |       |       |         +--rw l2vpn-evpn
            |       |       +--rw enable-bfd
            |       |       | +--rw config
            |       |       | | +--rw enabled?                 boolean
            |       |       | | +--rw extr-bfd-ext:profile?   profile-ref
            |       |       | +--ro state
            |       |       |    +--ro enabled?                        boolean
            |       |       |    +--ro extr-bfd-ext:profile?           profile-ref
            |       |       |    +--ro extr-bfd-ext:session-Id?        uint32
            |       |       |    +--ro extr-bfd-ext:vrf-Id?            uint32
            |       |       |    +--ro extr-bfd-ext:source-Ip?         oc-inet:ip-prefix
            |       |       |    +--ro extr-bfd-ext:destination-Ip?    oc-inet:ip-prefix
            |       |       |    +--ro extr-bfd-ext:registration-status?  boolean
            |       |       |    +--ro extr-bfd-ext:session-status?    uint8
            |       |       |    +--ro extr-bfd-ext:status-code?       uint8
            |       |       |    +--ro extr-bfd-ext:time-stamp?        oc-
types:timeticks64
            |       |     +--rw extr-bgp-ext:neighbors
            |       |        +--rw extr-bgp-ext:neighbor* [neighbor-address]
            |       |           +--rw extr-bgp-ext:neighbor-address    -> ../config/neighbor-
address
            |       |           +--rw extr-bgp-ext:config
            |       |           | +--rw extr-bgp-ext:neighbor-address?   oc-inet:ip-address
            |       |           +--ro extr-bgp-ext:state
            |       |              +--ro extr-bgp-ext:neighbor-address?   oc-inet:ip-address
            |     +--ro rib
            |     | +--ro attr-sets
            |     | | +--ro attr-set* [index]
```

```
            |      |  |      +--ro index                           -> ../state/index
            |      |  |      +--ro state
            |      |  |      |  +--ro index?          uint64
            |      |  |      |  +--ro origin?         oc-bgpt:bgp-origin-attr-type
            |      |  |      |  +--ro next-hop?       oc-inet:ip-address
            |      |  |      |  +--ro med?            uint32
            |      |  |      |  +--ro local-pref?     uint32
            |      |  |      |  +--ro originator-id?  oc-inet:ipv4-address
            |      |  |      |  +--ro cluster-list*   oc-inet:ipv4-address
            |      |  |      +--ro extr-rib-bgp-ext:as-path-str
            |      |  |         +--ro extr-rib-bgp-ext:state
            |      |  |            +--ro extr-rib-bgp-ext:as-path?   string
            |      +--ro communities
            |      |  +--ro community* [index]
            |      |     +--ro index    -> ../state/index
            |      |     +--ro state
            |      |        +--ro index?       uint64
            |      |        +--ro community*   union
            |      +--ro ext-communities
            |      |  +--ro ext-community* [index]
            |      |     +--ro index    -> ../state/index
            |      |     +--ro state
            |      |        +--ro index?         uint64
            |      |        +--ro ext-community*   oc-bgpt:bgp-ext-community-recv-type
            |      +--ro afi-safis
            |         +--ro afi-safi* [afi-safi-name]
            |            +--ro afi-safi-name    -> ../state/afi-safi-name
            |            +--ro state
            |            |  +--ro afi-safi-name?   identityref
            |            +--ro ipv4-unicast
            |            |  +--ro loc-rib
            |            |  |  +--ro state
            |            |  |  +--ro routes
            |            |  |     +--ro route* [prefix origin path-id]
            |            |  |        +--ro prefix     -> ../state/prefix
            |            |  |        +--ro origin     -> ../state/origin
            |            |  |        +--ro path-id    -> ../state/path-id
            |            |  |        +--ro state
            |            |  |           +--ro prefix?                      oc-inet:ipv4-prefix
            |            |  |           +--ro origin?                      union
            |            |  |           +--ro path-id?                     uint32
            |            |  |           +--ro attr-index?
-> ../../../../../../../../attr-sets/attr-set/state/index
            |            |  |           +--ro community-index?
-> ../../../../../../../../communities/community/state/index
            |            |  |           +--ro ext-community-index?
-> ../../../../../../../../ext-communities/ext-community/state/index
            |            |  |           +--ro last-modified?               oc-types:timeticks64
            |            |  |           +--ro valid-route?                 boolean
            |            |  |           +--ro invalid-reason?              identityref
            |            |  |           +--ro extr-rib-bgp-ext:multi-path?  boolean
            |            |  |           +--ro extr-rib-bgp-ext:stale?       boolean
            |            |  |           +--ro extr-rib-bgp-ext:primary?     boolean
            |            |  |           +--ro extr-rib-bgp-ext:secondary?   boolean
            |            |  |           +--ro extr-rib-bgp-ext:internal?    boolean
            |            |  |           +--ro extr-rib-bgp-ext:extrenal?    boolean
            |            |  |           +--ro extr-rib-bgp-ext:local?       boolean
            |            |  |           +--ro extr-rib-bgp-ext:redist?      boolean
            |            |  +--ro neighbors
            |            |  |  +--ro neighbor* [neighbor-address]
            |            |  |     +--ro neighbor-address    -> ../state/neighbor-address
            |            |  |     +--ro state
```

```
            |         |       | |         | +--ro neighbor-address?   oc-inet:ip-address
            |         |       | |       +--ro adj-rib-in-post
            |         |       | |          +--ro state
            |         |       | |          +--ro routes
            |         |       | |             +--ro route* [prefix path-id]
            |         |       | |                +--ro prefix     -> ../state/prefix
            |         |       | |                +--ro path-id    -> ../state/path-id
            |         |       | |                +--ro state
            |         |       | |                   +--ro prefix?                    oc-inet:ipv4-
prefix
            |         |       | |                   +--ro path-id?             uint32
            |         |       | |                   +--ro attr-index?
-> ../../../../../../../../../../attr-sets/attr-set/state/index
            |         |       | |                   +--ro community-index?
-> ../../../../../../../../../../communities/community/state/index
            |         |       | |                   +--ro ext-community-index?
-> ../../../../../../../../../../ext-communities/ext-community/state/index
            |         |       | |                   +--ro last-modified?       oc-
types:timeticks64
            |         |       | |                   +--ro valid-route?         boolean
            |         |       | |                   +--ro invalid-reason?      identityref
            |         |       | |                   +--ro best-path?           boolean
            |         |       +--ro extr-rib-bgp-ext:peer-groups
            |         |          +--ro extr-rib-bgp-ext:peer-group* [peer-group-name]
            |         |             +--ro extr-rib-bgp-ext:peer-group-name     -> ../state/
peer-group-name
            |         |             +--ro extr-rib-bgp-ext:state
            |         |             | +--ro extr-rib-bgp-ext:peer-group-name?   string
            |         |             +--ro extr-rib-bgp-ext:adj-rib-out-post
            |         |                +--ro extr-rib-bgp-ext:state
            |         |                +--ro extr-rib-bgp-ext:routes
            |         |                   +--ro extr-rib-bgp-ext:route* [prefix path-id]
            |         |                      +--ro extr-rib-bgp-ext:prefix     -> ../state/
prefix
            |         |                      +--ro extr-rib-bgp-ext:path-id    -> ../state/
path-id
            |         |                      +--ro extr-rib-bgp-ext:state
            |         |                         +--ro extr-rib-bgp-
ext:prefix?               oc-inet:ipv4-prefix
            |         |                         +--ro extr-rib-bgp-ext:path-
id?               uint32
            |         |                         +--ro extr-rib-bgp-ext:attr-
index?            -> ../../../../../../../../../../attr-sets/attr-set/state/index
            |         |                         +--ro extr-rib-bgp-ext:community-
index?       -> ../../../../../../../../../../communities/community/state/index
            |         |                         +--ro extr-rib-bgp-ext:ext-community-
index?   -> ../../../../../../../../../../ext-communities/ext-community/state/index
            |         |                         +--ro extr-rib-bgp-ext:last-
modified?          oc-types:timeticks64
            |         |                         +--ro extr-rib-bgp-ext:valid-
route?           boolean
            |         |                         +--ro extr-rib-bgp-ext:invalid-
reason?         identityref
         |         +--ro ipv6-unicast
         |         | +--ro loc-rib
         |         | | +--ro state
         |         | | +--ro routes
         |         | |    +--ro route* [prefix origin path-id]
         |         | |       +--ro prefix     -> ../state/prefix
         |         | |       +--ro origin     -> ../state/origin
         |         | |       +--ro path-id    -> ../state/path-id
         |         | |       +--ro state
         |         | |          +--ro prefix?                            oc-
inet:ipv6-prefix
```

```
        |        |        |  |                +--ro origin?                          union
        |        |        |  |                +--ro path-id?                         uint32
        |        |        |  |                +--ro attr-index?
-> ../../../../../../../../attr-sets/attr-set/state/index
        |        |        |  |                +--ro community-index?
-> ../../../../../../../../communities/community/state/index
        |        |        |  |                +--ro ext-community-index?
-> ../../../../../../../../ext-communities/ext-community/state/index
        |        |        |  |                +--ro last-modified?                   oc-
types:timeticks64
        |        |        |  |                +--ro valid-route?              boolean
        |        |        |  |                +--ro invalid-reason?           identityref
        |        |        |  |                +--ro extr-rib-bgp-ext:multi-path?  boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:stale?       boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:primary?     boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:secondary?   boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:internal?    boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:extrenal?    boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:local?       boolean
        |        |        |  |                +--ro extr-rib-bgp-ext:redist?      boolean
        |        |        +--ro neighbors
        |        |        |  +--ro neighbor* [neighbor-address]
        |        |        |     +--ro neighbor-address    -> ../state/neighbor-address
        |        |        |     +--ro state
        |        |        |     | +--ro neighbor-address?   oc-inet:ip-address
        |        |        |     +--ro adj-rib-in-post
        |        |        |        +--ro routes
        |        |        |           +--ro route* [prefix path-id]
        |        |        |              +--ro prefix     -> ../state/prefix
        |        |        |              +--ro path-id    -> ../state/path-id
        |        |        |              +--ro state
        |        |        |                 +--ro prefix?                 oc-inet:ipv6-
prefix
        |        |        |                 +--ro path-id?                uint32
        |        |        |                 +--ro attr-index?
-> ../../../../../../../../../attr-sets/attr-set/state/index
        |        |        |                 +--ro community-index?
-> ../../../../../../../../../communities/community/state/index
        |        |        |                 +--ro ext-community-index?
-> ../../../../../../../../../ext-communities/ext-community/state/index
        |        |        |                 +--ro last-modified?          oc-
types:timeticks64
        |        |        |                 +--ro valid-route?          boolean
        |        |        |                 +--ro invalid-reason?       identityref
        |        |        |                 +--ro best-path?            boolean
        |        |        +--ro extr-rib-bgp-ext:peer-groups
        |        |           +--ro extr-rib-bgp-ext:peer-group* [peer-group-name]
        |        |              +--ro extr-rib-bgp-ext:peer-group-name    -> ../state/
peer-group-name
        |        |              +--ro extr-rib-bgp-ext:state
        |        |              | +--ro extr-rib-bgp-ext:peer-group-name?   string
        |        |              +--ro extr-rib-bgp-ext:adj-rib-out-post
        |        |                 +--ro extr-rib-bgp-ext:routes
        |        |                    +--ro extr-rib-bgp-ext:route* [prefix path-id]
        |        |                       +--ro extr-rib-bgp-ext:prefix     -> ../state/
prefix
        |        |                       +--ro extr-rib-bgp-ext:path-id    -> ../state/
path-id
        |        |                       +--ro extr-rib-bgp-ext:state
        |        |                          +--ro extr-rib-bgp-
ext:prefix?              oc-inet:ipv6-prefix
        |        |                          +--ro extr-rib-bgp-ext:path-
id?              uint32
        |        |                          +--ro extr-rib-bgp-ext:attr-
```

```
index?               -> ../../../../../../../../../../attr-sets/attr-set/state/index
       |       |       |                        +--ro extr-rib-bgp-ext:community-
index?      -> ../../../../../../../../../../communities/community/state/index
       |       |       |                        +--ro extr-rib-bgp-ext:ext-community-
index?   -> ../../../../../../../../../../ext-communities/ext-community/state/index
       |       |       |                        +--ro extr-rib-bgp-ext:last-
modified?        oc-types:timeticks64
       |       |       |                        +--ro extr-rib-bgp-ext:valid-
route?           boolean
       |       |       |                        +--ro extr-rib-bgp-ext:invalid-
reason?        identityref
       |       |           +--ro l2vpn-evpn
       |       |             +--ro neighbors
       |       |             | +--ro neighbor* [neighbor-address]
       |       |             |    +--ro neighbor-address    -> ../state/neighbor-address
       |       |             |    +--ro state
       |       |             |    | +--ro neighbor-address?   oc-inet:ip-address
       |       |             |    +--ro adj-rib-in-post
       |       |             |    | +--ro extr-rib-bgp-ext:type-two-mac-ip-advertisement
       |       |             |    | | +--ro extr-rib-bgp-ext:type-two-route* [ethernet-
tag mac-address mac-length ip-prefix ip-length]
       |       |             |    | |       +--ro extr-rib-bgp-ext:ethernet-tag     -> ../
state/ethernet-tag
       |       |             |    | |       +--ro extr-rib-bgp-ext:mac-address      -> ../
state/mac-address
       |       |             |    | |       +--ro extr-rib-bgp-ext:mac-length       -> ../
state/mac-length
       |       |             |    | |       +--ro extr-rib-bgp-ext:ip-prefix        -> ../
state/ip-prefix
       |       |             |    | |       +--ro extr-rib-bgp-ext:ip-length        -> ../
state/ip-length
       |       |             |    | |       +--ro extr-rib-bgp-ext:state
       |       |             |    | |       | +--ro extr-rib-bgp-ext:ethernet-tag?   oc-
evpn-types:ethernet-tag
       |       |             |    | |       | +--ro extr-rib-bgp-ext:mac-address?    oc-
yang:mac-address
       |       |             |    | |       | +--ro extr-rib-bgp-ext:mac-length?
uint32
       |       |             |    | |       | +--ro extr-rib-bgp-ext:ip-prefix?      oc-
inet:ip-prefix
       |       |             |    | |       | +--ro extr-rib-bgp-ext:ip-length?
uint32
       |       |             |    | |       +--ro extr-rib-bgp-ext:paths
       |       |             |    | |       +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
       |       |             |    | |       +--ro extr-rib-bgp-ext:peer-
ip                -> ../state/peer-ip
       |       |             |    | |       +--ro extr-rib-bgp-ext:peer-path-
id             -> ../state/peer-path-id
       |       |             |    | |       +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
       |       |             |    | |       +--ro extr-rib-bgp-ext:source-address-
family        -> ../state/source-address-family
       |       |             |    | |       +--ro extr-rib-bgp-ext:state
       |       |             |    | |          +--ro extr-rib-bgp-ext:peer-
ip?                oc-inet:ip-address
       |       |             |    | |          +--ro extr-rib-bgp-ext:peer-path-
id?            uint32
       |       |             |    | |          +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
       |       |             |    | |          +--ro extr-rib-bgp-ext:source-
address-family?       identityref
       |       |             |    | |          +--ro extr-rib-bgp-
ext:label?                 string
```

```
          |        |           |     |  |                +--ro extr-rib-bgp-
ext:label2?                   string
          |        |           |     |  |                +--ro extr-rib-bgp-
ext:bestpath?                 boolean
          |        |           |     |  |                +--ro extr-rib-bgp-ext:last-
modified?                  oc-types:timeticks64
          |        |           |     |  |                +--ro extr-rib-bgp-ext:valid-
route?                 boolean
          |        |           |     |  |                +--ro extr-rib-bgp-ext:attr-
index?                     -> ../../../../../../../../../../../attr-sets/attr-set/state/
index
          |        |           |     |  |                +--ro extr-rib-bgp-ext:community-
index?            -> ../../../../../../../../../../../../communities/community/state/
index
          |        |           |     |  |                +--ro extr-rib-bgp-ext:ext-community-
index?         -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
          |        |           |     +--ro extr-rib-bgp-ext:type-three-inclusive-
multicast-ethernet-tag
          |        |           |     |  +--ro extr-rib-bgp-ext:type-three-route*
[ethernet-tag originating-router-ip originator-ip-length]
          |        |           |     |  |       +--ro extr-rib-bgp-ext:ethernet-
tag             -> ../state/ethernet-tag
          |        |           |     |  |       +--ro extr-rib-bgp-ext:originating-router-
ip    -> ../state/originating-router-ip
          |        |           |     |  |       +--ro extr-rib-bgp-ext:originator-ip-
length     -> ../state/originator-ip-length
          |        |           |     |  |       +--ro extr-rib-bgp-ext:state
          |        |           |     |  |       |  +--ro extr-rib-bgp-ext:ethernet-
tag?            oc-evpn-types:ethernet-tag
          |        |           |     |  |       |  +--ro extr-rib-bgp-ext:originating-router-
ip?   oc-inet:ip-prefix
          |        |           |     |  |       |  +--ro extr-rib-bgp-ext:originator-ip-
length?    uint32
          |        |           |     |  |       +--ro extr-rib-bgp-ext:paths
          |        |           |     |  |       +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
          |        |           |     |  |               +--ro extr-rib-bgp-ext:peer-
ip                 -> ../state/peer-ip
          |        |           |     |  |               +--ro extr-rib-bgp-ext:peer-path-
id               -> ../state/peer-path-id
          |        |           |     |  |               +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
          |        |           |     |  |               +--ro extr-rib-bgp-ext:source-address-
family        -> ../state/source-address-family
          |        |           |     |  |               +--ro extr-rib-bgp-ext:state
          |        |           |     |  |                 +--ro extr-rib-bgp-ext:peer-
ip?                 oc-inet:ip-address
          |        |           |     |  |                 +--ro extr-rib-bgp-ext:peer-path-
id?              uint32
          |        |           |     |  |                 +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
          |        |           |     |  |                 +--ro extr-rib-bgp-ext:source-
address-family?        identityref
          |        |           |     |  |                 +--ro extr-rib-bgp-
ext:label?                   string
          |        |           |     |  |                 +--ro extr-rib-bgp-
ext:label2?                  string
          |        |           |     |  |                 +--ro extr-rib-bgp-
ext:bestpath?                boolean
          |        |           |     |  |                 +--ro extr-rib-bgp-ext:last-
modified?                 oc-types:timeticks64
          |        |           |     |  |                 +--ro extr-rib-bgp-ext:valid-
route?                 boolean
```

```
      |            |           |       |   |                   +--ro extr-rib-bgp-ext:attr-
index?                      -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
      |            |           |       |   |                   +--ro extr-rib-bgp-ext:community-
index?              -> ../../../../../../../../../../../../communities/community/state/
index
      |            |           |       |   |                   +--ro extr-rib-bgp-ext:ext-community-
index?           -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
      |            |           |       |   +--ro extr-rib-bgp-ext:type-five-ip-prefix
      |            |           |       |      +--ro extr-rib-bgp-ext:type-five-route*
[ethernet-tag ip-prefix-length ip-prefix]
      |            |           |       |         +--ro extr-rib-bgp-ext:ethernet-tag
-> ../state/ethernet-tag
      |            |           |       |         +--ro extr-rib-bgp-ext:ip-prefix-length
-> ../state/ip-prefix-length
      |            |           |       |         +--ro extr-rib-bgp-ext:ip-prefix
-> ../state/ip-prefix
      |            |           |       |         +--ro extr-rib-bgp-ext:state
      |            |           |       |         |  +--ro extr-rib-bgp-ext:ethernet-tag?
oc-evpn-types:ethernet-tag
      |            |           |       |         |  +--ro extr-rib-bgp-ext:ip-prefix-length?
string
      |            |           |       |         |  +--ro extr-rib-bgp-ext:ip-prefix?
oc-inet:ip-prefix
      |            |           |       |         +--ro extr-rib-bgp-ext:paths
      |            |           |       |            +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
      |            |           |       |               +--ro extr-rib-bgp-ext:peer-
ip                      -> ../state/peer-ip
      |            |           |       |               +--ro extr-rib-bgp-ext:peer-path-
id                -> ../state/peer-path-id
      |            |           |       |               +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
      |            |           |       |               +--ro extr-rib-bgp-ext:source-address-
family          -> ../state/source-address-family
      |            |           |       |               +--ro extr-rib-bgp-ext:state
      |            |           |       |                  +--ro extr-rib-bgp-ext:gateway-ip-
address?            oc-inet:ip-prefix
      |            |           |       |                  +--ro extr-rib-bgp-ext:peer-
ip?                     oc-inet:ip-address
      |            |           |       |                  +--ro extr-rib-bgp-ext:peer-path-
id?             uint32
      |            |           |       |                  +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
      |            |           |       |                  +--ro extr-rib-bgp-ext:source-
address-family?       identityref
      |            |           |       |                  +--ro extr-rib-bgp-
ext:label?                       string
      |            |           |       |                  +--ro extr-rib-bgp-
ext:label2?                      string
      |            |           |       |                  +--ro extr-rib-bgp-
ext:bestpath?                    boolean
      |            |           |       |                  +--ro extr-rib-bgp-ext:last-
modified?               oc-types:timeticks64
      |            |           |       |                  +--ro extr-rib-bgp-ext:valid-
route?               boolean
      |            |           |       |                  +--ro extr-rib-bgp-ext:attr-
index?                 -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
      |            |           |       |                  +--ro extr-rib-bgp-ext:community-
index?           -> ../../../../../../../../../../../../communities/community/state/
index
      |            |           |       |                  +--ro extr-rib-bgp-ext:ext-community-
```

```
index?         -> ../../../../../../../../../../../ext-communities/ext-community/
state/index
        |       |             |       +--ro adj-rib-out-pre
        |       |             |       +--ro adj-rib-out-post
        |       |             +--ro extr-rib-bgp-ext:local-rib-nvo
        |       |             | +--ro extr-rib-bgp-ext:state
        |       |             | +--ro extr-rib-bgp-ext:routes
        |       |             |    +--ro extr-rib-bgp-ext:table* [nvo-name route-
distinguisher]
        |       |             |        +--ro extr-rib-bgp-ext:nvo-
name                             -> ../state/nvo-name
        |       |             |        +--ro extr-rib-bgp-ext:route-
distinguisher                       -> ../state/route-distinguisher
        |       |             |        +--ro extr-rib-bgp-ext:state
        |       |             |        | +--ro extr-rib-bgp-ext:nvo-name?
string
        |       |             |        | +--ro extr-rib-bgp-ext:route-distinguisher?   oc-
ni-types:route-distinguisher
        |       |             |        +--ro extr-rib-bgp-ext:type-two-mac-ip-advertisement
        |       |             |        | +--ro extr-rib-bgp-ext:type-two-route* [ethernet-
tag mac-address mac-length ip-prefix ip-length]
        |       |             |        |     +--ro extr-rib-bgp-ext:ethernet-tag    -> ../
state/ethernet-tag
        |       |             |        |     +--ro extr-rib-bgp-ext:mac-address     -> ../
state/mac-address
        |       |             |        |     +--ro extr-rib-bgp-ext:mac-length      -> ../
state/mac-length
        |       |             |        |     +--ro extr-rib-bgp-ext:ip-prefix       -> ../
state/ip-prefix
        |       |             |        |     +--ro extr-rib-bgp-ext:ip-length       -> ../
state/ip-length
        |       |             |        |     +--ro extr-rib-bgp-ext:state
        |       |             |        |     | +--ro extr-rib-bgp-ext:ethernet-tag?   oc-
evpn-types:ethernet-tag
        |       |             |        |     | +--ro extr-rib-bgp-ext:mac-address?    oc-
yang:mac-address
        |       |             |        |     | +--ro extr-rib-bgp-ext:mac-length?
uint32
        |       |             |        |     | +--ro extr-rib-bgp-ext:ip-prefix?       oc-
inet:ip-prefix
        |       |             |        |     | +--ro extr-rib-bgp-ext:ip-length?
uint32
        |       |             |        |     +--ro extr-rib-bgp-ext:paths
        |       |             |        |     +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
        |       |             |        |         +--ro extr-rib-bgp-ext:peer-
ip                 -> ../state/peer-ip
        |       |             |        |         +--ro extr-rib-bgp-ext:peer-path-
id              -> ../state/peer-path-id
        |       |             |        |         +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
        |       |             |        |         +--ro extr-rib-bgp-ext:source-address-
family       -> ../state/source-address-family
        |       |             |        |         +--ro extr-rib-bgp-ext:state
        |       |             |        |             +--ro extr-rib-bgp-ext:peer-
ip?                 oc-inet:ip-address
        |       |             |        |             +--ro extr-rib-bgp-ext:peer-path-
id?             uint32
        |       |             |        |             +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
        |       |             |        |             +--ro extr-rib-bgp-ext:source-
address-family?       identityref
        |       |             |        |             +--ro extr-rib-bgp-
ext:label?                  string
```

```
        |           |           |           |              +--ro extr-rib-bgp-
ext:label2?                    string
        |           |           |           |              +--ro extr-rib-bgp-
ext:bestpath?                  boolean
        |           |           |           |              +--ro extr-rib-bgp-ext:last-
modified?                  oc-types:timeticks64
        |           |           |           |              +--ro extr-rib-bgp-ext:valid-
route?                  boolean
        |           |           |           |              +--ro extr-rib-bgp-ext:attr-
index?                     -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
        |           |           |           |              +--ro extr-rib-bgp-ext:community-
index?               -> ../../../../../../../../../../../../communities/community/state/
index
        |           |           |           |              +--ro extr-rib-bgp-ext:ext-community-
index?          -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
        |           |           |           |              +--ro extr-rib-bgp-ext:multi-
path?                     boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:stale?                    boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:primary?                  boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:secondary?                boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:internal?                 boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:extrenal?                 boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:local?                    boolean
        |           |           |           |              +--ro extr-rib-bgp-
ext:redist?                   boolean
        |           |           |           +--ro extr-rib-bgp-ext:type-three-inclusive-
multicast-ethernet-tag
        |           |           |           |  +--ro extr-rib-bgp-ext:type-three-route*
[ethernet-tag originating-router-ip originator-ip-length]
        |           |           |           |         +--ro extr-rib-bgp-ext:ethernet-
tag             -> ../state/ethernet-tag
        |           |           |           |         +--ro extr-rib-bgp-ext:originating-router-
ip    -> ../state/originating-router-ip
        |           |           |           |         +--ro extr-rib-bgp-ext:originator-ip-
length     -> ../state/originator-ip-length
        |           |           |           |         +--ro extr-rib-bgp-ext:state
        |           |           |           |         |  +--ro extr-rib-bgp-ext:ethernet-
tag?           oc-evpn-types:ethernet-tag
        |           |           |           |         |  +--ro extr-rib-bgp-ext:originating-router-
ip?   oc-inet:ip-prefix
        |           |           |           |         |  +--ro extr-rib-bgp-ext:originator-ip-
length?    uint32
        |           |           |           |         +--ro extr-rib-bgp-ext:paths
        |           |           |           |            +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
        |           |           |           |                   +--ro extr-rib-bgp-ext:peer-
ip                     -> ../state/peer-ip
        |           |           |           |                   +--ro extr-rib-bgp-ext:peer-path-
id                -> ../state/peer-path-id
        |           |           |           |                   +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
        |           |           |           |                   +--ro extr-rib-bgp-ext:source-address-
family         -> ../state/source-address-family
        |           |           |           |                   +--ro extr-rib-bgp-ext:state
        |           |           |           |                      +--ro extr-rib-bgp-ext:peer-
ip?                    oc-inet:ip-address
```

```
         |         |         |         |                      +--ro extr-rib-bgp-ext:peer-path-
id?              uint32
         |         |         |         |                      +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
         |         |         |         |                      +--ro extr-rib-bgp-ext:source-
address-family?       identityref
         |         |         |         |                      +--ro extr-rib-bgp-
ext:label?                       string
         |         |         |         |                      +--ro extr-rib-bgp-
ext:label2?                      string
         |         |         |         |                      +--ro extr-rib-bgp-
ext:bestpath?                    boolean
         |         |         |         |                      +--ro extr-rib-bgp-ext:last-
modified?                oc-types:timeticks64
         |         |         |         |                      +--ro extr-rib-bgp-ext:valid-
route?                   boolean
         |         |         |         |                      +--ro extr-rib-bgp-ext:attr-
index?                   -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
         |         |         |         |                      +--ro extr-rib-bgp-ext:community-
index?             -> ../../../../../../../../../../../../communities/community/state/
index
         |         |         |         |                      +--ro extr-rib-bgp-ext:ext-community-
index?          -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
         |         |         |         |                      +--ro extr-rib-bgp-ext:multi-
path?                    boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:stale?                       boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:primary?                     boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:secondary?                   boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:internal?                    boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:extrenal?                    boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:local?                       boolean
         |         |         |         |                      +--ro extr-rib-bgp-
ext:redist?                      boolean
         |         |         |            +--ro extr-rib-bgp-ext:type-five-ip-prefix
         |         |         |               +--ro extr-rib-bgp-ext:type-five-route*
[ethernet-tag ip-prefix-length ip-prefix]
         |         |         |                  +--ro extr-rib-bgp-ext:ethernet-tag
-> ../state/ethernet-tag
         |         |         |                  +--ro extr-rib-bgp-ext:ip-prefix-length
-> ../state/ip-prefix-length
         |         |         |                  +--ro extr-rib-bgp-ext:ip-prefix
-> ../state/ip-prefix
         |         |         |                  +--ro extr-rib-bgp-ext:state
         |         |         |                  | +--ro extr-rib-bgp-ext:ethernet-tag?
oc-evpn-types:ethernet-tag
         |         |         |                  | +--ro extr-rib-bgp-ext:ip-prefix-length?
string
         |         |         |                  | +--ro extr-rib-bgp-ext:ip-prefix?
oc-inet:ip-prefix
         |         |         |                  +--ro extr-rib-bgp-ext:paths
         |         |         |                     +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
         |         |         |                        +--ro extr-rib-bgp-ext:peer-
ip                    -> ../state/peer-ip
         |         |         |                        +--ro extr-rib-bgp-ext:peer-path-
id                 -> ../state/peer-path-id
```

```
        |           |           |                         +--ro extr-rib-bgp-ext:source-route-
distinguisher      -> ../state/source-route-distinguisher
        |           |           |                         +--ro extr-rib-bgp-ext:source-address-
family         -> ../state/source-address-family
        |           |           |                         +--ro extr-rib-bgp-ext:state
        |           |           |                            +--ro extr-rib-bgp-ext:gateway-ip-
address?             oc-inet:ip-prefix
        |           |           |                            +--ro extr-rib-bgp-ext:peer-
ip?                   oc-inet:ip-address
        |           |           |                            +--ro extr-rib-bgp-ext:peer-path-
id?               uint32
        |           |           |                            +--ro extr-rib-bgp-ext:source-route-
distinguisher?    oc-ni-types:route-distinguisher
        |           |           |                            +--ro extr-rib-bgp-ext:source-
address-family?       identityref
        |           |           |                            +--ro extr-rib-bgp-
ext:label?                      string
        |           |           |                            +--ro extr-rib-bgp-
ext:label2?                     string
        |           |           |                            +--ro extr-rib-bgp-
ext:bestpath?                   boolean
        |           |           |                            +--ro extr-rib-bgp-ext:last-
modified?             oc-types:timeticks64
        |           |           |                            +--ro extr-rib-bgp-ext:valid-
route?            boolean
        |           |           |                            +--ro extr-rib-bgp-ext:attr-
index?                -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
        |           |           |                            +--ro extr-rib-bgp-ext:community-
index?            -> ../../../../../../../../../../../../communities/community/state/
index
        |           |           |                            +--ro extr-rib-bgp-ext:ext-community-
index?          -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
        |           |           |                            +--ro extr-rib-bgp-ext:multi-
path?                 boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:stale?                      boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:primary?                    boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:secondary?                  boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:internal?                   boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:extrenal?                   boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:local?                      boolean
        |           |           |                            +--ro extr-rib-bgp-
ext:redist?                     boolean
        |           |           +--ro extr-rib-bgp-ext:mac-vrf
        |           |           | +--ro extr-rib-bgp-ext:state
        |           |           | +--ro extr-rib-bgp-ext:routes
        |           |           |    +--ro extr-rib-bgp-ext:table* [evi-name bd-id]
        |           |           |        +--ro extr-rib-bgp-ext:evi-
name                    -> ../state/evi-name
        |           |           |        +--ro extr-rib-bgp-ext:bd-
id                      -> ../state/bd-id
        |           |           |        +--ro extr-rib-bgp-ext:state
        |           |           |        | +--ro extr-rib-bgp-ext:evi-name?   string
        |           |           |        | +--ro extr-rib-bgp-ext:bd-id?      uint32
        |           |           |        +--ro extr-rib-bgp-ext:type-two-mac-ip-advertisement
        |           |           |        | +--ro extr-rib-bgp-ext:type-two-route* [ethernet-
tag mac-address mac-length ip-prefix ip-length]
```

```
            |        |            |          +--ro extr-rib-bgp-ext:ethernet-tag    -> ../
state/ethernet-tag
            |        |            |          +--ro extr-rib-bgp-ext:mac-address     -> ../
state/mac-address
            |        |            |          +--ro extr-rib-bgp-ext:mac-length      -> ../
state/mac-length
            |        |            |          +--ro extr-rib-bgp-ext:ip-prefix       -> ../
state/ip-prefix
            |        |            |          +--ro extr-rib-bgp-ext:ip-length       -> ../
state/ip-length
            |        |            |          +--ro extr-rib-bgp-ext:state
            |        |            |          | +--ro extr-rib-bgp-ext:ethernet-tag?   oc-
evpn-types:ethernet-tag
            |        |            |          | +--ro extr-rib-bgp-ext:mac-address?    oc-
yang:mac-address
            |        |            |          | +--ro extr-rib-bgp-ext:mac-length?
uint32
            |        |            |          | +--ro extr-rib-bgp-ext:ip-prefix?      oc-
inet:ip-prefix
            |        |            |          | +--ro extr-rib-bgp-ext:ip-length?
uint32
            |        |            |          | +--ro extr-rib-bgp-ext:multi-path?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:stale?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:primary?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:secondary?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:internal?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:extrenal?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:local?
boolean
            |        |            |          | +--ro extr-rib-bgp-ext:redist?
boolean
            |        |            |          +--ro extr-rib-bgp-ext:paths
            |        |            |          +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
            |        |            |          +--ro extr-rib-bgp-ext:peer-
ip                  -> ../state/peer-ip
            |        |            |          +--ro extr-rib-bgp-ext:peer-path-
id            -> ../state/peer-path-id
            |        |            |          +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
            |        |            |          +--ro extr-rib-bgp-ext:source-address-
family        -> ../state/source-address-family
            |        |            |          +--ro extr-rib-bgp-ext:state
            |        |            |             +--ro extr-rib-bgp-ext:peer-
ip?                  oc-inet:ip-address
            |        |            |             +--ro extr-rib-bgp-ext:peer-path-
id?            uint32
            |        |            |             +--ro extr-rib-bgp-ext:source-route-
distinguisher?  oc-ni-types:route-distinguisher
            |        |            |             +--ro extr-rib-bgp-ext:source-
address-family?        identityref
            |        |            |             +--ro extr-rib-bgp-
ext:label?                      string
            |        |            |             +--ro extr-rib-bgp-
ext:label2?                     string
            |        |            |             +--ro extr-rib-bgp-
ext:bestpath?                   boolean
            |        |            |             +--ro extr-rib-bgp-ext:last-
```

```
modified?                    oc-types:timeticks64
      |       |          |          |                   +--ro extr-rib-bgp-ext:valid-
route?                   boolean
      |       |          |          |                   +--ro extr-rib-bgp-ext:attr-
index?                   -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
      |       |          |          |                   +--ro extr-rib-bgp-ext:community-
index?              -> ../../../../../../../../../../../../communities/community/state/
index
      |       |          |          |                   +--ro extr-rib-bgp-ext:ext-community-
index?           -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
      |       |          |          |                   +--ro extr-rib-bgp-
ext:ifname?                          string
      |       |          |       +--ro extr-rib-bgp-ext:type-three-inclusive-
multicast-ethernet-tag
      |       |          |       | +--ro extr-rib-bgp-ext:type-three-route*
[ethernet-tag originating-router-ip originator-ip-length]
      |       |          |       |             +--ro extr-rib-bgp-ext:ethernet-
tag            -> ../state/ethernet-tag
      |       |          |       |             +--ro extr-rib-bgp-ext:originating-router-
ip    -> ../state/originating-router-ip
      |       |          |       |             +--ro extr-rib-bgp-ext:originator-ip-
length    -> ../state/originator-ip-length
      |       |          |       |             +--ro extr-rib-bgp-ext:state
      |       |          |       |             | +--ro extr-rib-bgp-ext:ethernet-
tag?           oc-evpn-types:ethernet-tag
      |       |          |       |             | +--ro extr-rib-bgp-ext:originating-router-
ip?   oc-inet:ip-prefix
      |       |          |       |             | +--ro extr-rib-bgp-ext:originator-ip-
length?    uint32
      |       |          |       |             +--ro extr-rib-bgp-ext:paths
      |       |          |       |             +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
      |       |          |       |                   +--ro extr-rib-bgp-ext:peer-
ip                   -> ../state/peer-ip
      |       |          |       |                   +--ro extr-rib-bgp-ext:peer-path-
id               -> ../state/peer-path-id
      |       |          |       |                   +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
      |       |          |       |                   +--ro extr-rib-bgp-ext:source-address-
family        -> ../state/source-address-family
      |       |          |       |                   +--ro extr-rib-bgp-ext:state
      |       |          |       |                      +--ro extr-rib-bgp-ext:peer-
ip?                   oc-inet:ip-address
      |       |          |       |                      +--ro extr-rib-bgp-ext:peer-path-
id?               uint32
      |       |          |       |                      +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
      |       |          |       |                      +--ro extr-rib-bgp-ext:source-
address-family?        identityref
      |       |          |       |                      +--ro extr-rib-bgp-
ext:label?                          string
      |       |          |       |                      +--ro extr-rib-bgp-
ext:label2?                         string
      |       |          |       |                      +--ro extr-rib-bgp-
ext:bestpath?                       boolean
      |       |          |       |                      +--ro extr-rib-bgp-ext:last-
modified?               oc-types:timeticks64
      |       |          |       |                      +--ro extr-rib-bgp-ext:valid-
route?                   boolean
      |       |          |       |                      +--ro extr-rib-bgp-ext:attr-
index?                   -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
```

```
        |       |           |           |                       +--ro extr-rib-bgp-ext:community-
index?          -> ../../../../../../../../../../../../communities/community/state/
index
        |       |           |           |                       +--ro extr-rib-bgp-ext:ext-community-
index?          -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
        |       |           |           |                       +--ro extr-rib-bgp-
ext:ifname?                         string
        |       |           |           +--ro extr-rib-bgp-ext:type-five-ip-prefix
        |       |           |              +--ro extr-rib-bgp-ext:type-five-route*
[ethernet-tag ip-prefix-length ip-prefix]
        |       |           |                 +--ro extr-rib-bgp-ext:ethernet-tag
-> ../state/ethernet-tag
        |       |           |                 +--ro extr-rib-bgp-ext:ip-prefix-length
-> ../state/ip-prefix-length
        |       |           |                 +--ro extr-rib-bgp-ext:ip-prefix
-> ../state/ip-prefix
        |       |           |                 +--ro extr-rib-bgp-ext:state
        |       |           |                 | +--ro extr-rib-bgp-ext:ethernet-tag?
oc-evpn-types:ethernet-tag
        |       |           |                 | +--ro extr-rib-bgp-ext:ip-prefix-length?
string
        |       |           |                 | +--ro extr-rib-bgp-ext:ip-prefix?
oc-inet:ip-prefix
        |       |           |                 +--ro extr-rib-bgp-ext:paths
        |       |           |                    +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
        |       |           |                       +--ro extr-rib-bgp-ext:peer-
ip                      -> ../state/peer-ip
        |       |           |                       +--ro extr-rib-bgp-ext:peer-path-
id                  -> ../state/peer-path-id
        |       |           |                       +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
        |       |           |                       +--ro extr-rib-bgp-ext:source-address-
family          -> ../state/source-address-family
        |       |           |                       +--ro extr-rib-bgp-ext:state
        |       |           |                          +--ro extr-rib-bgp-ext:gateway-ip-
address?             oc-inet:ip-prefix
        |       |           |                          +--ro extr-rib-bgp-ext:peer-
ip?                     oc-inet:ip-address
        |       |           |                          +--ro extr-rib-bgp-ext:peer-path-
id?                 uint32
        |       |           |                          +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
        |       |           |                          +--ro extr-rib-bgp-ext:source-
address-family?        identityref
        |       |           |                          +--ro extr-rib-bgp-
ext:label?                      string
        |       |           |                          +--ro extr-rib-bgp-
ext:label2?                     string
        |       |           |                          +--ro extr-rib-bgp-
ext:bestpath?                   boolean
        |       |           |                          +--ro extr-rib-bgp-ext:last-
modified?                oc-types:timeticks64
        |       |           |                          +--ro extr-rib-bgp-ext:valid-
route?                  boolean
        |       |           |                          +--ro extr-rib-bgp-ext:attr-
index?                 -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
        |       |           |                          +--ro extr-rib-bgp-ext:community-
index?           -> ../../../../../../../../../../../../communities/community/state/
index
        |       |           |                          +--ro extr-rib-bgp-ext:ext-community-
index?          -> ../../../../../../../../../../../../ext-communities/ext-community/
```

```
state/index
        |          |                  +--ro extr-rib-bgp-ext:peer-groups
        |          |                    +--ro extr-rib-bgp-ext:peer-group* [peer-group-name]
        |          |                       +--ro extr-rib-bgp-ext:peer-group-name      -> ../state/
peer-group-name
        |          |                       +--ro extr-rib-bgp-ext:state
        |          |                       | +--ro extr-rib-bgp-ext:peer-group-name?   string
        |          |                       +--ro extr-rib-bgp-ext:adj-rib-out-post
        |          |                          +--ro extr-rib-bgp-ext:type-two-mac-ip-advertisement
        |          |                          | +--ro extr-rib-bgp-ext:type-two-route* [ethernet-
tag mac-address mac-length ip-prefix ip-length]
        |          |                          |    +--ro extr-rib-bgp-ext:ethernet-tag    -> ../
state/ethernet-tag
        |          |                          |    +--ro extr-rib-bgp-ext:mac-address     -> ../
state/mac-address
        |          |                          |    +--ro extr-rib-bgp-ext:mac-length      -> ../
state/mac-length
        |          |                          |    +--ro extr-rib-bgp-ext:ip-prefix       -> ../
state/ip-prefix
        |          |                          |    +--ro extr-rib-bgp-ext:ip-length       -> ../
state/ip-length
        |          |                          |    +--ro extr-rib-bgp-ext:state
        |          |                          |    | +--ro extr-rib-bgp-ext:ethernet-tag?   oc-
evpn-types:ethernet-tag
        |          |                          |    | +--ro extr-rib-bgp-ext:mac-address?    oc-
yang:mac-address
        |          |                          |    | +--ro extr-rib-bgp-ext:mac-length?
uint32
        |          |                          |    | +--ro extr-rib-bgp-ext:ip-prefix?      oc-
inet:ip-prefix
        |          |                          |    | +--ro extr-rib-bgp-ext:ip-length?
uint32
        |          |                          |    +--ro extr-rib-bgp-ext:paths
        |          |                          |       +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
        |          |                          |          +--ro extr-rib-bgp-ext:peer-
ip                    -> ../state/peer-ip
        |          |                          |          +--ro extr-rib-bgp-ext:peer-path-
id             -> ../state/peer-path-id
        |          |                          |          +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
        |          |                          |          +--ro extr-rib-bgp-ext:source-address-
family        -> ../state/source-address-family
        |          |                          |          +--ro extr-rib-bgp-ext:state
        |          |                          |             +--ro extr-rib-bgp-ext:peer-
ip?                    oc-inet:ip-address
        |          |                          |             +--ro extr-rib-bgp-ext:peer-path-
id?              uint32
        |          |                          |             +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
        |          |                          |             +--ro extr-rib-bgp-ext:source-
address-family?        identityref
        |          |                          |             +--ro extr-rib-bgp-
ext:label?                       string
        |          |                          |             +--ro extr-rib-bgp-
ext:label2?                      string
        |          |                          |             +--ro extr-rib-bgp-
ext:bestpath?                    boolean
        |          |                          |             +--ro extr-rib-bgp-ext:last-
modified?                oc-types:timeticks64
        |          |                          |             +--ro extr-rib-bgp-ext:valid-
route?                   boolean
        |          |                          |             +--ro extr-rib-bgp-ext:attr-
index?                   -> ../../../../../../../../../../../../attr-sets/attr-set/state/
```

```
index
        |        |                    |                         +--ro extr-rib-bgp-ext:community-
index?          -> ../../../../../../../../../../../../../communities/community/state/
index
        |        |                    |                         +--ro extr-rib-bgp-ext:ext-community-
index?         -> ../../../../../../../../../../../../../ext-communities/ext-community/
state/index
        |        |                    +--ro extr-rib-bgp-ext:type-three-inclusive-
multicast-ethernet-tag
        |        |                    | +--ro extr-rib-bgp-ext:type-three-route*
[ethernet-tag originating-router-ip originator-ip-length]
        |        |                    |        +--ro extr-rib-bgp-ext:ethernet-
tag          -> ../state/ethernet-tag
        |        |                    |        +--ro extr-rib-bgp-ext:originating-router-
ip    -> ../state/originating-router-ip
        |        |                    |        +--ro extr-rib-bgp-ext:originator-ip-
length    -> ../state/originator-ip-length
        |        |                    |        +--ro extr-rib-bgp-ext:state
        |        |                    |        | +--ro extr-rib-bgp-ext:ethernet-
tag?          oc-evpn-types:ethernet-tag
        |        |                    |        | +--ro extr-rib-bgp-ext:originating-router-
ip?   oc-inet:ip-prefix
        |        |                    |        | +--ro extr-rib-bgp-ext:originator-ip-
length?   uint32
        |        |                    |        +--ro extr-rib-bgp-ext:paths
        |        |                    |           +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
        |        |                    |              +--ro extr-rib-bgp-ext:peer-
ip                -> ../state/peer-ip
        |        |                    |              +--ro extr-rib-bgp-ext:peer-path-
id                -> ../state/peer-path-id
        |        |                    |              +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
        |        |                    |              +--ro extr-rib-bgp-ext:source-address-
family        -> ../state/source-address-family
        |        |                    |              +--ro extr-rib-bgp-ext:state
        |        |                    |                 +--ro extr-rib-bgp-ext:peer-
ip?                oc-inet:ip-address
        |        |                    |                 +--ro extr-rib-bgp-ext:peer-path-
id?            uint32
        |        |                    |                 +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
        |        |                    |                 +--ro extr-rib-bgp-ext:source-
address-family?        identityref
        |        |                    |                 +--ro extr-rib-bgp-
ext:label?                string
        |        |                    |                 +--ro extr-rib-bgp-
ext:label2?                string
        |        |                    |                 +--ro extr-rib-bgp-
ext:bestpath?                boolean
        |        |                    |                 +--ro extr-rib-bgp-ext:last-
modified?             oc-types:timeticks64
        |        |                    |                 +--ro extr-rib-bgp-ext:valid-
route?             boolean
        |        |                    |                 +--ro extr-rib-bgp-ext:attr-
index?             -> ../../../../../../../../../../../../../attr-sets/attr-set/state/
index
        |        |                    |                 +--ro extr-rib-bgp-ext:community-
index?          -> ../../../../../../../../../../../../../communities/community/state/
index
        |        |                    |                 +--ro extr-rib-bgp-ext:ext-community-
index?         -> ../../../../../../../../../../../../../ext-communities/ext-community/
state/index
        |        |                    +--ro extr-rib-bgp-ext:type-five-ip-prefix
```

```
              |       |                            +--ro extr-rib-bgp-ext:type-five-route*
[ethernet-tag ip-prefix-length ip-prefix]
              |       |                               +--ro extr-rib-bgp-ext:ethernet-tag
-> ../state/ethernet-tag
              |       |                               +--ro extr-rib-bgp-ext:ip-prefix-length
-> ../state/ip-prefix-length
              |       |                               +--ro extr-rib-bgp-ext:ip-prefix
-> ../state/ip-prefix
              |       |                               +--ro extr-rib-bgp-ext:state
              |       |                               |  +--ro extr-rib-bgp-ext:ethernet-tag?
oc-evpn-types:ethernet-tag
              |       |                               |  +--ro extr-rib-bgp-ext:ip-prefix-length?
string
              |       |                               |  +--ro extr-rib-bgp-ext:ip-prefix?
oc-inet:ip-prefix
              |       |                               +--ro extr-rib-bgp-ext:paths
              |       |                                  +--ro extr-rib-bgp-ext:path* [peer-ip peer-
path-id source-route-distinguisher source-address-family]
              |       |                                     +--ro extr-rib-bgp-ext:peer-
ip                       -> ../state/peer-ip
              |       |                                     +--ro extr-rib-bgp-ext:peer-path-
id               -> ../state/peer-path-id
              |       |                                     +--ro extr-rib-bgp-ext:source-route-
distinguisher    -> ../state/source-route-distinguisher
              |       |                                     +--ro extr-rib-bgp-ext:source-address-
family         -> ../state/source-address-family
              |       |                                     +--ro extr-rib-bgp-ext:state
              |       |                                        +--ro extr-rib-bgp-ext:gateway-ip-
address?           oc-inet:ip-prefix
              |       |                                        +--ro extr-rib-bgp-ext:peer-
ip?                     oc-inet:ip-address
              |       |                                        +--ro extr-rib-bgp-ext:peer-path-
id?              uint32
              |       |                                        +--ro extr-rib-bgp-ext:source-route-
distinguisher?   oc-ni-types:route-distinguisher
              |       |                                        +--ro extr-rib-bgp-ext:source-
address-family?        identityref
              |       |                                        +--ro extr-rib-bgp-
ext:label?                      string
              |       |                                        +--ro extr-rib-bgp-
ext:label2?                     string
              |       |                                        +--ro extr-rib-bgp-
ext:bestpath?                   boolean
              |       |                                        +--ro extr-rib-bgp-ext:last-
modified?            oc-types:timeticks64
              |       |                                        +--ro extr-rib-bgp-ext:valid-
route?               boolean
              |       |                                        +--ro extr-rib-bgp-ext:attr-
index?                -> ../../../../../../../../../../../../attr-sets/attr-set/state/
index
              |       |                                        +--ro extr-rib-bgp-ext:community-
index?           -> ../../../../../../../../../../../../communities/community/state/
index
              |       |                                        +--ro extr-rib-bgp-ext:ext-community-
index?           -> ../../../../../../../../../../../../ext-communities/ext-community/
state/index
              |              +--ro extr-bgp-ext:tunnels
              |                 +--ro extr-bgp-ext:tunnel* [nve dst-ip]
              |                    +--ro extr-bgp-ext:nve        -> ../state/nve
              |                    +--ro extr-bgp-ext:dst-ip    -> ../state/dst-ip
              |                    +--ro extr-bgp-ext:state
              |                       +--ro extr-bgp-ext:tunnel-type?      extr-bgp-types:tunnel-types
              |                       +--ro extr-bgp-ext:nve?              string
              |                       +--ro extr-bgp-ext:dst-ip?           string
```

```
|                         +--ro extr-bgp-ext:ifname?           string
|                         +--ro extr-bgp-ext:src-ip?           string
|                         +--ro extr-bgp-ext:ifindex?          uint32
|                         +--ro extr-bgp-ext:oper-state?       boolean
|                         +--ro extr-bgp-ext:bridge-domains*   oc-ni:network-instance-ref
+--rw oc-pgrmerrs:programming-errors
|  +--rw oc-pgrmerrs:ip-routes
|     +--rw oc-pgrmerrs:config
|     |  +--rw oc-pgrmerrs:enabled?   boolean
|     +--ro oc-pgrmerrs:state
|     |  +--ro oc-pgrmerrs:total-errors?   oc-yang:counter64
|     |  +--ro oc-pgrmerrs:enabled?        boolean
|     +--ro oc-pgrmerrs:failed-routes
|     |  +--ro oc-pgrmerrs:failed* [prefix]
|     |     +--ro oc-pgrmerrs:prefix    -> ../state/prefix
|     |     +--ro oc-pgrmerrs:state
|     |        +--ro oc-pgrmerrs:prefix?   oc-inet:ip-prefix
|     |        +--ro oc-pgrmerrs:time?     oc-types:timeticks64
|     +--ro oc-pgrmerrs:stale-routes
|     |  +--ro oc-pgrmerrs:stale* [prefix]
|     |     +--ro oc-pgrmerrs:prefix    -> ../state/prefix
|     |     +--ro oc-pgrmerrs:state
|     |        +--ro oc-pgrmerrs:prefix?   oc-inet:ip-prefix
|     |        +--ro oc-pgrmerrs:time?     oc-types:timeticks64
|     +--ro oc-pgrmerrs:drop-routes
|        +--ro oc-pgrmerrs:drop* [prefix]
|           +--ro oc-pgrmerrs:prefix    -> ../state/prefix
|           +--ro oc-pgrmerrs:state
|              +--ro oc-pgrmerrs:prefix?   oc-inet:ip-prefix
|              +--ro oc-pgrmerrs:time?     oc-types:timeticks64
+--ro extr-ni-tables-network-ext:tables-network
|  +--ro extr-ni-tables-network-ext:ipv4-unicast
|  |  +--ro extr-ni-tables-network-ext:ipv4-entry* [prefix-len prefix]
|  |     +--ro extr-ni-tables-network-ext:prefix-len    -> ../state/prefix-len
|  |     +--ro extr-ni-tables-network-ext:prefix        -> ../state/prefix
|  |     +--ro extr-ni-tables-network-ext:route-infos
|  |     |  +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
|  |     |     +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
|  |     |     +--ro extr-ni-tables-network-ext:state
|  |     |        +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
|  |     |        +--ro extr-ni-tables-network-ext:type?              identityref
|  |     |        +--ro extr-ni-tables-network-ext:tag?               uint32
|  |     |        +--ro extr-ni-tables-network-ext:admin-distance?    uint8
|  |     |        +--ro extr-ni-tables-network-ext:metric?            uint32
|  |     |        +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
|  |     |        +--ro extr-ni-tables-network-ext:next-hop-group?
-> ../../../../../../next-hop-groups/next-hop-group/state/id
|  |     +--ro extr-ni-tables-network-ext:state
|  |        +--ro extr-ni-tables-network-ext:prefix-len?            uint8
|  |        +--ro extr-ni-tables-network-ext:prefix?                oc-inet:ipv4-
prefix
|  |        +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
|  |        +--ro extr-ni-tables-network-ext:hardware-status?        identityref
|  +--ro extr-ni-tables-network-ext:ipv6-unicast
|  |  +--ro extr-ni-tables-network-ext:ipv6-entry* [prefix-len prefix]
|  |     +--ro extr-ni-tables-network-ext:prefix-len    -> ../state/prefix-len
|  |     +--ro extr-ni-tables-network-ext:prefix        -> ../state/prefix
|  |     +--ro extr-ni-tables-network-ext:route-infos
|  |     |  +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
|  |     |     +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
|  |     |     +--ro extr-ni-tables-network-ext:state
```

```
        | |     |             +--ro extr-ni-tables-network-ext:origin-protocol?    identityref
        | |     |             +--ro extr-ni-tables-network-ext:type?                identityref
        | |     |             +--ro extr-ni-tables-network-ext:tag?                 uint32
        | |     |             +--ro extr-ni-tables-network-ext:admin-distance?      uint8
        | |     |             +--ro extr-ni-tables-network-ext:metric?              uint32
        | |     |             +--ro extr-ni-tables-network-ext:last-updated?        oc-
types:timeticks64
        | |     |             +--ro extr-ni-tables-network-ext:next-hop-group?
-> ../../../../../../next-hop-groups/next-hop-group/state/id
        | |       +--ro extr-ni-tables-network-ext:state
        | |          +--ro extr-ni-tables-network-ext:prefix-len?            uint8
        | |          +--ro extr-ni-tables-network-ext:prefix?               oc-inet:ipv6-
prefix
        | |          +--ro extr-ni-tables-network-ext:best-origin-protocol?  identityref
        | |          +--ro extr-ni-tables-network-ext:hardware-status?       identityref
        | +--ro extr-ni-tables-network-ext:ethernet
        | | +--ro extr-ni-tables-network-ext:mac-entry* [mac-address]
        | |    +--ro extr-ni-tables-network-ext:mac-address    -> ../state/mac-address
        | |    +--ro extr-ni-tables-network-ext:route-infos
        | |    | +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        | |    |    +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        | |    |    +--ro extr-ni-tables-network-ext:state
        | |    |       +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        | |    |       +--ro extr-ni-tables-network-ext:type?              identityref
        | |    |       +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        | |    |       +--ro extr-ni-tables-network-ext:seq-no?            uint32
        | |    |       +--ro extr-ni-tables-network-ext:next-hop-group?
-> ../../../../../../next-hop-groups/next-hop-group/state/id
        | |    +--ro extr-ni-tables-network-ext:state
        | |       +--ro extr-ni-tables-network-ext:mac-address?            oc-yang:mac-
address
        | |       +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        | |       +--ro extr-ni-tables-network-ext:hardware-status?        identityref
        | +--ro extr-ni-tables-network-ext:ipv4-neighbor
        | | +--ro extr-ni-tables-network-ext:ipv4-nbr-entry* [nbr-address]
        | |    +--ro extr-ni-tables-network-ext:nbr-address    -> ../state/nbr-address
        | |    +--ro extr-ni-tables-network-ext:route-infos
        | |    | +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        | |    |    +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        | |    |    +--ro extr-ni-tables-network-ext:state
        | |    |    | +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        | |    |    | +--ro extr-ni-tables-network-ext:type?              identityref
        | |    |    | +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        | |    |    | +--ro extr-ni-tables-network-ext:seq-no?            uint32
        | |    |    | +--ro extr-ni-tables-network-ext:mac-address?       oc-yang:mac-
address
        | |    |    +--ro extr-ni-tables-network-ext:interface-ref
        | |    |       +--ro extr-ni-tables-network-ext:state
        | |    |          +--ro extr-ni-tables-network-ext:interface?      -> /oc-
if:interfaces/interface/name
        | |    |          +--ro extr-ni-tables-network-ext:subinterface?   -> /oc-
if:interfaces/interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/
index
        | |    |          +--ro extr-ni-tables-network-ext:l3-interface?   -> /oc-
if:interfaces/interface/name
        | |    +--ro extr-ni-tables-network-ext:state
        | |       +--ro extr-ni-tables-network-ext:nbr-address?            oc-inet:ipv4-
prefix
        | |       +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        | +--ro extr-ni-tables-network-ext:ipv6-neighbor
```

```
        | |  +--ro extr-ni-tables-network-ext:ipv6-nbr-entry* [nbr-address]
        | |     +--ro extr-ni-tables-network-ext:nbr-address     -> ../state/nbr-address
        | |     +--ro extr-ni-tables-network-ext:route-infos
        | |     |  +--ro extr-ni-tables-network-ext:route-info* [origin-protocol]
        | |     |     +--ro extr-ni-tables-network-ext:origin-protocol    -> ../state/
origin-protocol
        | |     |     +--ro extr-ni-tables-network-ext:state
        | |     |     |  +--ro extr-ni-tables-network-ext:origin-protocol?   identityref
        | |     |     |  +--ro extr-ni-tables-network-ext:type?              identityref
        | |     |     |  +--ro extr-ni-tables-network-ext:last-updated?      oc-
types:timeticks64
        | |     |     |  +--ro extr-ni-tables-network-ext:seq-no?            uint32
        | |     |     |  +--ro extr-ni-tables-network-ext:mac-address?       oc-yang:mac-
address
        | |     |     +--ro extr-ni-tables-network-ext:interface-ref
        | |     |        +--ro extr-ni-tables-network-ext:state
        | |     |           +--ro extr-ni-tables-network-ext:interface?     -> /oc-
if:interfaces/interface/name
        | |     |           +--ro extr-ni-tables-network-ext:subinterface?   -> /oc-
if:interfaces/interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/
index
        | |     |           +--ro extr-ni-tables-network-ext:l3-interface?   -> /oc-
if:interfaces/interface/name
        | |     +--ro extr-ni-tables-network-ext:state
        | |        +--ro extr-ni-tables-network-ext:nbr-address?            oc-inet:ipv6-
prefix
        | |        +--ro extr-ni-tables-network-ext:best-origin-protocol?   identityref
        | +--ro extr-ni-tables-network-ext:next-hop-groups
        | |  +--ro extr-ni-tables-network-ext:next-hop-group* [id]
        | |     +--ro extr-ni-tables-network-ext:id        -> ../state/id
        | |     +--ro extr-ni-tables-network-ext:state
        | |        +--ro extr-ni-tables-network-ext:id?
uint64
        | |        +--ro extr-ni-tables-network-ext:secondary-active?
boolean
        | |        +--ro extr-ni-tables-network-ext:next-hops*
-> ../../../../next-hops/next-hop/state/index
        | |        +--ro extr-ni-tables-network-ext:protocol-next-hops*
-> ../../../../next-hops/next-hop/state/index
        | |        +--ro extr-ni-tables-network-ext:secondary-protocol-next-hops*
-> ../../../../next-hops/next-hop/state/index
        | +--ro extr-ni-tables-network-ext:next-hops
        |    +--ro extr-ni-tables-network-ext:next-hop* [index]
        |       +--ro extr-ni-tables-network-ext:index          -> ../state/index
        |       +--ro extr-ni-tables-network-ext:state
        |       |  +--ro extr-ni-tables-network-ext:index?                  uint64
        |       |  +--ro extr-ni-tables-network-ext:type?                   extr-ni-
types:next-hop-type
        |       |  +--ro extr-ni-tables-network-ext:network-instance-name?  string
        |       |  +--ro extr-ni-tables-network-ext:ip-address?             oc-inet:ip-
address
        |       |  +--ro extr-ni-tables-network-ext:mac-address?            oc-yang:mac-
address
        |       +--ro extr-ni-tables-network-ext:interface-ref
        |          +--ro extr-ni-tables-network-ext:state
        |             +--ro extr-ni-tables-network-ext:interface?      -> /oc-
if:interfaces/interface/name
        |             +--ro extr-ni-tables-network-ext:subinterface?   -> /oc-
if:interfaces/interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/
index
        |             +--ro extr-ni-tables-network-ext:l3-interface?   -> /oc-
if:interfaces/interface/name
        +--rw extr-ni-ext:vni-domains
           +--rw extr-ni-ext:vni-domain* [name]
```

```
               +--rw extr-ni-ext:name      -> ../config/name
               +--rw extr-ni-ext:config
               |  +--rw extr-ni-ext:name?   string
               |  +--rw extr-ni-ext:vni?    uint32
               +--ro extr-ni-ext:state
                  +--ro extr-ni-ext:name?   string
                  +--ro extr-ni-ext:vni?    uint32

module: openconfig-system
  +--rw system
     +--rw extr-sys-ext:global
     |  +--rw extr-sys-ext:l2
     |  |  +--rw extr-sys-ext:mac-move-detection
     |  |     +--rw extr-sys-ext:config
     |  |     |  +--rw extr-sys-ext:enable?              boolean
     |  |     |  +--rw extr-sys-ext:interval?            uint16
     |  |     |  +--rw extr-sys-ext:threshold?           uint16
     |  |     |  +--rw extr-sys-ext:action?              mac-move-action
     |  |     |  +--rw extr-sys-ext:auto-recovery-time?  uint16
     |  |     +--ro extr-sys-ext:state
     |  |     |  +--ro extr-sys-ext:enable?              boolean
     |  |     |  +--ro extr-sys-ext:interval?            uint16
     |  |     |  +--ro extr-sys-ext:threshold?           uint16
     |  |     |  +--ro extr-sys-ext:action?              mac-move-action
     |  |     |  +--ro extr-sys-ext:auto-recovery-time?  uint16
     |  |     +--rw extr-sys-ext:ports
     |  |        +--rw extr-sys-ext:port* [interface subinterface]
     |  |           +--rw extr-sys-ext:interface       -> /oc-if:interfaces/interface/name
     |  |           +--rw extr-sys-ext:subinterface    -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
     |  |           +--ro extr-sys-ext:state
     |  |              +--ro extr-sys-ext:interface?      -> /oc-if:interfaces/interface/
name
     |  |              +--ro extr-sys-ext:subinterface?   -> /oc-if:interfaces/
interface[oc-if:name=current()/../interface]/subinterfaces/subinterface/index
     |  |              +--ro extr-sys-ext:bd-id?          uint16
     |  |              +--ro extr-sys-ext:no-shut-time?   int64
     |  +--rw extr-sys-ext:config
     |  |  +--rw extr-sys-ext:ipv4-anycast-gateway-mac?   oc-yang:mac-address
     |  |  +--rw extr-sys-ext:ipv6-anycast-gateway-mac?   oc-yang:mac-address
     |  |  +--rw extr-sys-ext:ecmp-max-path?              uint8
     |  |  +--rw extr-sys-ext:mac-aging-time?             uint32
     |  |  +--rw extr-sys-ext:l2-mtu?                     uint16
     |  |  +--rw extr-sys-ext:ip-mtu?                     uint16
     |  |  +--rw extr-sys-ext:contact?                    string
     |  |  +--rw extr-sys-ext:location?                   string
     |  +--ro extr-sys-ext:state
     |     +--ro extr-sys-ext:ipv4-anycast-gateway-mac?   oc-yang:mac-address
     |     +--ro extr-sys-ext:ipv6-anycast-gateway-mac?   oc-yang:mac-address
     |     +--ro extr-sys-ext:ecmp-max-path?              uint8
     |     +--ro extr-sys-ext:mac-aging-time?             uint32
     |     +--ro extr-sys-ext:l2-mtu?                     uint16
     |     +--ro extr-sys-ext:ip-mtu?                     uint16
     |     +--ro extr-sys-ext:contact?                    string
     |     +--ro extr-sys-ext:location?                   string
     +--rw extr-sys-ext:rme
     |  +--rw extr-sys-ext:config
     |  |  +--rw extr-sys-ext:port?               oc-if:base-interface-ref
     |  |  +--rw extr-sys-ext:performance-mode?   oc-if:base-interface-ref
     |  +--ro extr-sys-ext:state
     |     +--ro extr-sys-ext:port?               oc-if:base-interface-ref
     |     +--ro extr-sys-ext:performance-mode?   oc-if:base-interface-ref
     |     +--ro extr-sys-ext:redundancy?         string
     |     +--ro extr-sys-ext:active?             string
```

```
        |     +--ro extr-sys-ext:memberset?          string
        |     +--ro extr-sys-ext:primary?            string
        +--rw extr-sys-ext:maintenance-mode
        |  +--rw extr-sys-ext:config
        |  |  +--rw extr-sys-ext:enable-on-reload?   boolean
        |  +--ro extr-sys-ext:state
        |     +--ro extr-sys-ext:enable-on-reload?   boolean
        |     +--ro extr-sys-ext:enabled?            boolean
        |     +--ro extr-sys-ext:status?             identityref
        +--rw extr-sys-iah:iah
           +--rw extr-sys-iah:host
           |  +--ro extr-sys-iah:state
           |     +--ro extr-sys-iah:name?                       string
           |     +--ro extr-sys-iah:hypervisor?                 string
           |     +--ro extr-sys-iah:hypervisor-driver-version?  string
           |     +--ro extr-sys-iah:libvirt-version?            string
           |     +--ro extr-sys-iah:kernel-version?             string
           |     +--ro extr-sys-iah:cpu-model?                  string
           |     +--ro extr-sys-iah:cpu-clock?                  uint32
           |     +--ro extr-sys-iah:cpus?                       uint32
           |     +--ro extr-sys-iah:sockets?                    uint32
           |     +--ro extr-sys-iah:cores-per-socket?           uint32
           |     +--ro extr-sys-iah:threads-per-core?           uint32
           |     +--ro extr-sys-iah:numa-cells?                 uint32
           |     +--ro extr-sys-iah:memory?                     uint32
           |     +--ro extr-sys-iah:vms-limit?                  uint32
           |     +--ro extr-sys-iah:vms-deployed?               uint32
           |     +--ro extr-sys-iah:vcpus-limit?                uint32
           |     +--ro extr-sys-iah:memory-limit?               uint32
           |     +--ro extr-sys-iah:disk-space-limit?           uint32
           |     +--ro extr-sys-iah:vcpus-available?            uint32
           |     +--ro extr-sys-iah:memory-available?           uint32
           |     +--ro extr-sys-iah:disk-space-available?       uint32
           +--rw extr-sys-iah:vms
              +--rw extr-sys-iah:vm* [name]
                 +--rw extr-sys-iah:name        -> ../config/name
                 +--rw extr-sys-iah:config
                 |  +--rw extr-sys-iah:name?               string
                 |  +--rw extr-sys-iah:description?        string
                 |  +--rw extr-sys-iah:deploy?             boolean
                 |  +--rw extr-sys-iah:auto-boot?          boolean
                 |  +--rw extr-sys-iah:activate-network?   boolean
                 |  +--rw extr-sys-iah:cpus?               uint32
                 |  +--rw extr-sys-iah:ram?                uint32
                 +--ro extr-sys-iah:state
                 |  +--ro extr-sys-iah:name?               string
                 |  +--ro extr-sys-iah:description?        string
                 |  +--ro extr-sys-iah:deploy?             boolean
                 |  +--ro extr-sys-iah:auto-boot?          boolean
                 |  +--ro extr-sys-iah:activate-network?   boolean
                 |  +--ro extr-sys-iah:cpus?               uint32
                 |  +--ro extr-sys-iah:ram?                uint32
                 |  +--ro extr-sys-iah:id?                 uint32
                 |  +--ro extr-sys-iah:deploy-status?      string
                 |  +--ro extr-sys-iah:vm-status?          enumeration
                 |  +--ro extr-sys-iah:last-error?         string
                 +--rw extr-sys-iah:disks
                 |  +--rw extr-sys-iah:disk* [name]
                 |     +--rw extr-sys-iah:name        -> ../config/name
                 |     +--rw extr-sys-iah:config
                 |     |  +--rw extr-sys-iah:name?          string
                 |     |  +--rw extr-sys-iah:size?          uint32
                 |     |  +--rw extr-sys-iah:source-file?   string
                 |     |  +--rw extr-sys-iah:file-format?   enumeration
```

```
|      |  +--rw extr-sys-iah:bus-type?      enumeration
|      +--ro extr-sys-iah:state
|         +--ro extr-sys-iah:name?          string
|         +--ro extr-sys-iah:size?          uint32
|         +--ro extr-sys-iah:source-file?   string
|         +--ro extr-sys-iah:file-format?   enumeration
|         +--ro extr-sys-iah:bus-type?      enumeration
+--rw extr-sys-iah:networks
|  +--rw extr-sys-iah:network* [name]
|     +--rw extr-sys-iah:name        -> ../config/name
|     +--rw extr-sys-iah:config
|     |  +--rw extr-sys-iah:name?            string
|     |  +--rw extr-sys-iah:interface?       string
|     |  +--rw extr-sys-iah:mac?             oc-yang:mac-address
|     |  +--rw extr-sys-iah:connector-type?  enumeration
|     +--ro extr-sys-iah:state
|        +--ro extr-sys-iah:name?            string
|        +--ro extr-sys-iah:interface?       string
|        +--ro extr-sys-iah:mac?             oc-yang:mac-address
|        +--ro extr-sys-iah:connector-type?  enumeration
+--rw extr-sys-iah:snapshot
|  +--ro extr-sys-iah:state
|     +--ro extr-sys-iah:description?   string
|     +--ro extr-sys-iah:version?       string
|     +--ro extr-sys-iah:time?          yang:date-and-time
|     +--ro extr-sys-iah:size?          uint32
+--rw extr-sys-iah:tpvm
   +--rw extr-sys-iah:config
   |  +--rw extr-sys-iah:user?       string
   |  +--rw extr-sys-iah:password?   string
   |  +--rw extr-sys-iah:hostname?   string
   |  +--rw extr-sys-iah:timezone?   oc-sys:timezone-name-type
   +--rw extr-sys-iah:state
   |  +--rw extr-sys-iah:user?             string
   |  +--rw extr-sys-iah:password?         string
   |  +--rw extr-sys-iah:hostname?         string
   |  +--rw extr-sys-iah:timezone?         oc-sys:timezone-name-type
   |  +--rw extr-sys-iah:version?          string
   |  +--rw extr-sys-iah:os-release?       string
   |  +--rw extr-sys-iah:kernel-version?   string
   |  +--rw extr-sys-iah:ssh-passwordless? boolean
   +--rw extr-sys-iah:management
   |  +--rw extr-sys-iah:config
   |  |  +--rw extr-sys-iah:ipv4-addr?  oc-inet:ipv4-prefix
   |  |  +--rw extr-sys-iah:ipv4-gw?    oc-inet:ipv4-address
   |  |  +--rw extr-sys-iah:dhcp4?      boolean
   |  |  +--rw extr-sys-iah:ipv6-addr?  oc-inet:ipv6-prefix
   |  |  +--rw extr-sys-iah:ipv6-gw?    oc-inet:ipv6-address
   |  |  +--rw extr-sys-iah:dhcp6?      boolean
   |  +--ro extr-sys-iah:state
   |     +--ro extr-sys-iah:ipv4-addr?  oc-inet:ipv4-prefix
   |     +--ro extr-sys-iah:ipv4-gw?    oc-inet:ipv4-address
   |     +--ro extr-sys-iah:dhcp4?      boolean
   |     +--ro extr-sys-iah:ipv6-addr?  oc-inet:ipv6-prefix
   |     +--ro extr-sys-iah:ipv6-gw?    oc-inet:ipv6-address
   |     +--ro extr-sys-iah:dhcp6?      boolean
   +--rw extr-sys-iah:ntp
   |  +--rw extr-sys-iah:servers* [server]
   |     +--rw extr-sys-iah:server    -> ../config/server
   |     +--rw extr-sys-iah:config
   |     |  +--rw extr-sys-iah:server?  oc-inet:host
   |     +--rw extr-sys-iah:state
   |        +--rw extr-sys-iah:server?  oc-inet:host
   +--rw extr-sys-iah:ntp-data
```

```
                      |  +--rw extr-sys-iah:state
                      |     +--rw extr-sys-iah:service-state?    string
                      |     +--rw extr-sys-iah:clock-sync?       boolean
                      |     +--rw extr-sys-iah:local-time?       yang:date-and-time
                      |     +--rw extr-sys-iah:universal-time?   yang:date-and-time
                      |     +--rw extr-sys-iah:rtc-time?         yang:date-and-time
                      |     +--rw extr-sys-iah:time-zone?        oc-sys:timezone-name-type
                      +--rw extr-sys-iah:dns
                      |  +--rw extr-sys-iah:config
                      |  |  +--rw extr-sys-iah:primary-server?     oc-inet:host
                      |  |  +--rw extr-sys-iah:secondary-server?   oc-inet:host
                      |  |  +--rw extr-sys-iah:domain?             string
                      |  +--rw extr-sys-iah:state
                      |     +--rw extr-sys-iah:primary-server?     oc-inet:host
                      |     +--rw extr-sys-iah:secondary-server?   oc-inet:host
                      |     +--rw extr-sys-iah:domain?             string
                      +--rw extr-sys-iah:ldap
                      |  +--rw extr-sys-iah:config
                      |  |  +--rw extr-sys-iah:host?           oc-inet:host
                      |  |  +--rw extr-sys-iah:port?           uint16
                      |  |  +--rw extr-sys-iah:secure?         boolean
                      |  |  +--rw extr-sys-iah:basedn?         string
                      |  |  +--rw extr-sys-iah:rootdn?         string
                      |  |  +--rw extr-sys-iah:rootdnpw?       string
                      |  |  +--rw extr-sys-iah:rootdnpw-hashed?   string
                      |  |  +--rw extr-sys-iah:enable?         boolean
                      |  +--rw extr-sys-iah:state
                      |     +--rw extr-sys-iah:host?           oc-inet:host
                      |     +--rw extr-sys-iah:port?           uint16
                      |     +--rw extr-sys-iah:secure?         boolean
                      |     +--rw extr-sys-iah:basedn?         string
                      |     +--rw extr-sys-iah:rootdn?         string
                      |     +--rw extr-sys-iah:rootdnpw?       string
                      |     +--rw extr-sys-iah:rootdnpw-hashed?   string
                      |     +--rw extr-sys-iah:enable?         boolean
                      +--rw extr-sys-iah:ldap-cacert
                      |  +--rw extr-sys-iah:config
                      |  |  +--rw extr-sys-iah:ca-certificate?   string
                      |  +--rw extr-sys-iah:state
                      |     +--rw extr-sys-iah:ca-certificate?   string
                      +--rw extr-sys-iah:trusted-peer
                         +--rw extr-sys-iah:config
                         |  +--rw extr-sys-iah:peer-ip?              oc-inet:ipv4-address
                         |  +--rw extr-sys-iah:peer-ipv6?            oc-inet:ipv6-address
                         |  +--rw extr-sys-iah:peer-sudoer?          string
                         |  +--rw extr-sys-iah:peer-password?        string
                         |  +--rw extr-sys-iah:peer-password-hashed?   string
                         +--rw extr-sys-iah:state
                            +--rw extr-sys-iah:peer-ip?              oc-inet:ipv4-address
                            +--rw extr-sys-iah:peer-ipv6?            oc-inet:ipv6-address
                            +--rw extr-sys-iah:peer-sudoer?          string
                            +--rw extr-sys-iah:peer-password?        string
                            +--rw extr-sys-iah:peer-password-hashed?   string

module: openconfig-interfaces
  +--rw interfaces
     +--rw interface* [name]
        +--rw name                  -> ../config/name
        +--rw config
        |  +--rw name?           string
        |  +--rw type            identityref
        |  +--rw mtu?            uint16
        |  +--rw loopback-mode?   oc-opt-types:loopback-mode-type
        |  +--rw description?    string
```

```
          |  +--rw enabled?          boolean
          +--ro state
          |  +--ro name?                         string
          |  +--ro type                          identityref
          |  +--ro mtu?                          uint16
          |  +--ro loopback-mode?                oc-opt-types:loopback-mode-type
          |  +--ro description?                  string
          |  +--ro enabled?                      boolean
          |  +--ro ifindex?                      uint32
          |  +--ro admin-status                  enumeration
          |  +--ro oper-status                   enumeration
          |  +--ro last-change?                  oc-types:timeticks64
          |  +--ro counters
          |  |  +--ro in-octets?            oc-yang:counter64
          |  |  +--ro in-pkts?              oc-yang:counter64
          |  |  +--ro in-unicast-pkts?      oc-yang:counter64
          |  |  +--ro in-broadcast-pkts?    oc-yang:counter64
          |  |  +--ro in-multicast-pkts?    oc-yang:counter64
          |  |  +--ro in-errors?            oc-yang:counter64
          |  |  +--ro in-discards?          oc-yang:counter64
          |  |  +--ro out-octets?           oc-yang:counter64
          |  |  +--ro out-pkts?             oc-yang:counter64
          |  |  +--ro out-unicast-pkts?     oc-yang:counter64
          |  |  +--ro out-broadcast-pkts?   oc-yang:counter64
          |  |  +--ro out-multicast-pkts?   oc-yang:counter64
          |  |  +--ro out-discards?         oc-yang:counter64
          |  |  +--ro out-errors?           oc-yang:counter64
          |  |  +--ro last-clear?           oc-types:timeticks64
          |  |  +--ro in-unknown-protos?    oc-yang:counter64
          |  |  +--ro in-fcs-errors?        oc-yang:counter64
          |  |  x--ro carrier-transitions?  oc-yang:counter64
          |  |  +--ro extr-if-ext:if-mib-counter
          |  |     +--ro extr-if-ext:if-counter-discontinuity-time?   string
          |  +--ro extr-if-ext:if-mib
          |  |  +--ro extr-if-ext:if-last-change?   string
          |  +--ro extr-if-ext:oper-down-reason?   identityref
          +--rw subinterfaces
          |  +--rw subinterface* [index]
          |     +--rw index             -> ../config/index
          |     +--rw config
          |     |  +--rw index?              uint32
          |     |  +--rw description?        string
          |     |  +--rw enabled?            boolean
          |     |  +--rw extr-if-ext:if-mode?   identityref
          |     +--ro state
          |     |  +--ro index?                   uint32
          |     |  +--ro description?             string
          |     |  +--ro enabled?                 boolean
          |     |  +--ro name?                    string
          |     |  +--ro ifindex?                 uint32
          |     |  +--ro admin-status             enumeration
          |     |  +--ro oper-status              enumeration
          |     |  +--ro last-change?             oc-types:timeticks64
          |     |  +--ro logical?                 boolean
          |     |  +--ro management?              boolean
          |     |  +--ro cpu?                     boolean
          |     |  +--ro counters
          |     |  |  +--ro in-octets?         oc-yang:counter64
          |     |  |  +--ro in-pkts?           oc-yang:counter64
          |     |  |  +--ro in-unicast-pkts?   oc-yang:counter64
          |     |  |  +--ro in-broadcast-pkts? oc-yang:counter64
          |     |  |  +--ro in-multicast-pkts? oc-yang:counter64
          |     |  |  +--ro in-errors?         oc-yang:counter64
          |     |  |  +--ro in-discards?       oc-yang:counter64
```

```
|       |   |  +--ro out-octets?              oc-yang:counter64
|       |   |  +--ro out-pkts?                oc-yang:counter64
|       |   |  +--ro out-unicast-pkts?        oc-yang:counter64
|       |   |  +--ro out-broadcast-pkts?      oc-yang:counter64
|       |   |  +--ro out-multicast-pkts?      oc-yang:counter64
|       |   |  +--ro out-discards?            oc-yang:counter64
|       |   |  +--ro out-errors?              oc-yang:counter64
|       |   |  +--ro last-clear?              oc-types:timeticks64
|       |   |  x--ro in-unknown-protos?       oc-yang:counter64
|       |   |  x--ro in-fcs-errors?           oc-yang:counter64
|       |   |  x--ro carrier-transitions?     oc-yang:counter64
|       |  +--ro extr-if-ext:oper-down-reason?    identityref
|       |  +--ro extr-if-ext:if-mode?             identityref
|      +--rw oc-vlan:vlan
|      |  +--rw oc-vlan:match
|      |     +--rw oc-vlan:single-tagged
|      |     |  +--rw oc-vlan:config
|      |     |  |  +--rw oc-vlan:vlan-id?   oc-vlan-types:vlan-id
|      |     |  +--ro oc-vlan:state
|      |     |     +--ro oc-vlan:vlan-id?   oc-vlan-types:vlan-id
|      |     +--rw oc-vlan:double-tagged
|      |     |  +--rw oc-vlan:config
|      |     |  |  +--rw oc-vlan:inner-vlan-id?   oc-vlan-types:vlan-id
|      |     |  |  +--rw oc-vlan:outer-vlan-id?   oc-vlan-types:vlan-id
|      |     |  +--ro oc-vlan:state
|      |     |     +--ro oc-vlan:inner-vlan-id?   oc-vlan-types:vlan-id
|      |     |     +--ro oc-vlan:outer-vlan-id?   oc-vlan-types:vlan-id
|      |     +--rw extr-vlan-ext:un-tagged
|      |        +--rw extr-vlan-ext:config
|      |        |  +--rw extr-vlan-ext:vlan-id?      oc-vlan-types:vlan-id
|      |        |  +--rw extr-vlan-ext:accept-mode?   identityref
|      |        +--ro extr-vlan-ext:state
|      |           +--ro extr-vlan-ext:vlan-id?      oc-vlan-types:vlan-id
|      |           +--ro extr-vlan-ext:accept-mode?   identityref
|      +--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
|      |  |     |  +--rw extr-ip-ext:secondary?   boolean
|      |  |     +--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
|      |  |        +--ro extr-ip-ext:secondary?   boolean
|      |  |        +--ro extr-ip-ext:status?      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:config
|      |  |  +--rw oc-ip:mtu?                          uint16
|      |  |  +--rw oc-ip:dhcp-client?                  boolean
|      |  |  +--rw extr-ip-ext:neighbor-reachabletime?   uint16
|      |  +--ro oc-ip:state
|      |     +--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
|     |     +--ro extr-ip-ext:neighbor-reachabletime?   uint16
|     +--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
|        |    | +--rw extr-ip-ext:secondary?   boolean
|        |    | +--rw extr-ip-ext:eui-64?      boolean
|        |    +--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
|        |       +--ro extr-ip-ext:secondary?   boolean
|        |       +--ro extr-ip-ext:eui-64?      boolean
|        +--rw oc-ip:router-advertisement
|        | +--rw oc-ip:config
|        | | +--rw oc-ip:enable?            boolean
|        | | +--rw oc-ip:interval?          uint32
|        | | +--rw oc-ip:lifetime?          uint32
|        | | x--rw oc-ip:suppress?          boolean
|        | | +--rw oc-ip:mode?              enumeration
|        | | +--rw oc-ip:managed?           boolean
|        | | +--rw oc-ip:other-config?      boolean
|        | | +--rw extr-ip-ext:min-interval?  uint32
|        | | +--rw extr-ip-ext:hop-limit?     uint8
|        | +--ro oc-ip:state
|        | | +--ro oc-ip:enable?            boolean
|        | | +--ro oc-ip:interval?          uint32
|        | | +--ro oc-ip:lifetime?          uint32
|        | | x--ro oc-ip:suppress?          boolean
|        | | +--ro oc-ip:mode?              enumeration
|        | | +--ro oc-ip:managed?           boolean
|        | | +--ro oc-ip:other-config?      boolean
|        | | +--ro extr-ip-ext:min-interval?  uint32
|        | | +--ro extr-ip-ext:hop-limit?     uint8
|        | | +--ro extr-ip-ext:last-ra-tx?    oc-types:timeticks64
|        | | +--ro extr-ip-ext:next-ra-tx?    oc-types:timeticks64
|        | +--rw oc-ip:prefixes
|        |    +--rw oc-ip:prefix* [prefix]
|        |       +--rw oc-ip:prefix    -> ../config/prefix
|        |       +--rw oc-ip:config
|        |       | +--rw oc-ip:prefix?                     oc-inet:ipv6-prefix
|        |       | +--rw oc-ip:valid-lifetime?             uint32
|        |       | +--rw oc-ip:preferred-lifetime?         uint32
|        |       | +--rw oc-ip:disable-advertisement?      boolean
|        |       | +--rw oc-ip:disable-autoconfiguration?  boolean
|        |       | +--rw oc-ip:enable-onlink?              boolean
```

```
|         |              +--ro oc-ip:state
|         |                 +--ro oc-ip:prefix?                      oc-inet:ipv6-prefix
|         |                 +--ro oc-ip:valid-lifetime?              uint32
|         |                 +--ro oc-ip:preferred-lifetime?          uint32
|         |                 +--ro oc-ip:disable-advertisement?       boolean
|         |                 +--ro oc-ip:disable-autoconfiguration?   boolean
|         |                 +--ro oc-ip:enable-onlink?               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:config
|         |  +--rw oc-ip:mtu?                          uint32
|         |  +--rw oc-ip:dup-addr-detect-transmits?    uint32
|         |  +--rw oc-ip:dhcp-client?                  boolean
|         |  +--rw extr-ip-ext:neighbor-reachabletime?  uint16
|         +--ro oc-ip:state
|         |  +--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
|         |  +--ro extr-ip-ext:neighbor-reachabletime?   uint16
|         +--rw oc-ip-ext:autoconf
|            +--rw oc-ip-ext:config
|            |  +--rw oc-ip-ext:create-global-addresses?   boolean
|            +--ro oc-ip-ext:state
|               +--ro oc-ip-ext:create-global-addresses?   boolean
+--rw oc-eth:ethernet
|  +--rw oc-eth:config
|  |  +--rw oc-eth:mac-address?                    oc-yang:mac-address
|  |  +--rw oc-eth:auto-negotiate?                 boolean
|  |  +--rw oc-eth:duplex-mode?                    enumeration
|  |  +--rw oc-eth:port-speed?                     identityref
|  |  +--rw oc-eth:fec-mode?                       identityref
|  |  +--rw oc-lag:aggregate-id?                   -> /oc-if:interfaces/
interface/name
|  |  +--rw extr-lacp-ext:port-priority?           uint16
|  |  +--rw extr-lacp-ext:interval?                oc-lacp:lacp-period-type
|  |  +--rw extr-lacp-ext:lacp-mode?               oc-lacp:lacp-activity-type
|  |  +--rw extr-eth-ext:fec
|  |  |  +--rw extr-eth-ext:fec-mode?   fec-mode-type
|  |  +--rw extr-eth-ext:link-fault-signaling?     boolean
|  |  +--rw extr-eth-ext:interfaces-auto?          boolean
|  |  +--rw extr-eth-ext:interfaces-auto-negotiation?   boolean
```

```
|  |  +--rw extr-eth-ext:interfaces-loopback-mode?      boolean
| +--ro oc-eth:state
|    +--ro oc-eth:mac-address?                           oc-yang:mac-address
|    +--ro oc-eth:auto-negotiate?                        boolean
|    +--ro oc-eth:duplex-mode?                           enumeration
|    +--ro oc-eth:port-speed?                            identityref
|    +--ro oc-eth:fec-mode?                              identityref
|    +--ro oc-eth:hw-mac-address?                        oc-yang:mac-address
|    +--ro oc-eth:negotiated-duplex-mode?                enumeration
|    +--ro oc-eth:negotiated-port-speed?                 identityref
|    +--ro oc-eth:counters
|    |  +--ro oc-eth:in-mac-control-frames?        oc-yang:counter64
|    |  +--ro oc-eth:in-mac-pause-frames?          oc-yang:counter64
|    |  +--ro oc-eth:in-oversize-frames?           oc-yang:counter64
|    |  +--ro oc-eth:in-undersize-frames?          oc-yang:counter64
|    |  +--ro oc-eth:in-jabber-frames?             oc-yang:counter64
|    |  +--ro oc-eth:in-fragment-frames?           oc-yang:counter64
|    |  +--ro oc-eth:in-8021q-frames?              oc-yang:counter64
|    |  +--ro oc-eth:in-crc-errors?                oc-yang:counter64
|    |  +--ro oc-eth:in-block-errors?              oc-yang:counter64
|    |  +--ro oc-eth:in-carrier-errors?            oc-yang:counter64
|    |  +--ro oc-eth:in-interrupted-tx?            oc-yang:counter64
|    |  +--ro oc-eth:in-late-collision?            oc-yang:counter64
|    |  +--ro oc-eth:in-mac-errors-rx?             oc-yang:counter64
|    |  +--ro oc-eth:in-single-collision?          oc-yang:counter64
|    |  +--ro oc-eth:in-symbol-error?              oc-yang:counter64
|    |  +--ro oc-eth:in-maxsize-exceeded?          oc-yang:counter64
|    |  +--ro oc-eth:out-mac-control-frames?       oc-yang:counter64
|    |  +--ro oc-eth:out-mac-pause-frames?         oc-yang:counter64
|    |  +--ro oc-eth:out-8021q-frames?             oc-yang:counter64
|    |  +--ro oc-eth:out-mac-errors-tx?            oc-yang:counter64
|    |  +--ro oc-eth-ext:in-distribution
|    |  |  +--ro oc-eth-ext:in-frames-64-octets?           oc-yang:counter64
|    |  |  +--ro oc-eth-ext:in-frames-65-127-octets?       oc-yang:counter64
|    |  |  +--ro oc-eth-ext:in-frames-128-255-octets?      oc-yang:counter64
|    |  |  +--ro oc-eth-ext:in-frames-256-511-octets?      oc-yang:counter64
|    |  |  +--ro oc-eth-ext:in-frames-512-1023-octets?     oc-yang:counter64
|    |  |  +--ro oc-eth-ext:in-frames-1024-1518-octets?    oc-yang:counter64
|    |  +--ro extr-eth-ext:bandwidth-utilization
|    |  |  +--ro extr-eth-ext:in-pkts-per-sec?             uint64
|    |  |  +--ro extr-eth-ext:out-pkts-per-sec?            uint64
|    |  |  +--ro extr-eth-ext:in-bits-per-sec?             uint64
|    |  |  +--ro extr-eth-ext:out-bits-per-sec?            uint64
|    |  |  +--ro extr-eth-ext:in-bandwidth-percentage?     oc-types:percentage
|    |  |  +--ro extr-eth-ext:out-bandwidth-percentage?    oc-types:percentage
|    |  +--ro extr-eth-ext:eth-fec-counters
|    |  |  +--ro extr-eth-ext:fec-uncorrected-pkts?   oc-yang:counter64
|    |  |  +--ro extr-eth-ext:fec-corrected-pkts?     oc-yang:counter64
|    |  +--ro extr-eth-ext:in-overrun-frames?       oc-yang:counter64
|    |  +--ro extr-eth-ext:out-carrier-errors-tx?   oc-yang:counter64
|    |  +--ro extr-eth-ext:out-collisions-tx?       oc-yang:counter64
|    +--ro oc-lag:aggregate-id?                              -> /oc-if:interfaces/
interface/name
|    +--ro extr-lacp-ext:port-priority?              uint16
|    +--ro extr-lacp-ext:interval?                          oc-lacp:lacp-period-
type
|    +--ro extr-lacp-ext:lacp-mode?                         oc-lacp:lacp-activity-
type
|    +--ro extr-eth-ext:ethernet-link-dampening-status
|    |  +--ro extr-eth-ext:link-dampening-status?   uint32
|    |  +--ro extr-eth-ext:last-updated?            oc-types:timeticks64
|    +--ro extr-eth-ext:fec
|    |  +--ro extr-eth-ext:fec-mode?    fec-mode-type
|    +--ro extr-eth-ext:link-fault-signaling?            boolean
```

```
       |      +--ro extr-eth-ext:link-fault-status?                string
       |      +--ro extr-eth-ext:local-fault-count?                uint64
       |      +--ro extr-eth-ext:remote-fault-count?               uint64
       |      +--ro extr-eth-ext:last-local-fault?                 oc-types:timeticks64
       |      +--ro extr-eth-ext:last-remote-fault?                oc-types:timeticks64
       |      +--ro extr-eth-ext:interfaces-auto?                  boolean
       |      +--ro extr-eth-ext:interfaces-auto-negotiation?      boolean
       |      +--ro extr-eth-ext:interfaces-loopback-mode?         boolean
       +--rw oc-lag:aggregation
       |  +--rw oc-lag:config
       |  |  +--rw oc-lag:lag-type?                       aggregation-type
       |  |  +--rw oc-lag:min-links?                      uint16
       |  |  +--rw extr-lag-ext:lag-load-balance-method?  aggregation-load-balance-
method
       |  |  +--rw extr-lag-ext:port-speed?               identityref
       |  +--ro oc-lag:state
       |     +--ro oc-lag:lag-type?                       aggregation-type
       |     +--ro oc-lag:min-links?                      uint16
       |     +--ro oc-lag:lag-speed?                      uint32
       |     +--ro oc-lag:member*                         oc-if:base-interface-ref
       |     +--ro extr-lag-ext:member-list*              oc-if:base-interface-ref
       |     +--ro extr-lag-ext:active-member-list*       oc-if:base-interface-ref
       |     +--ro extr-lag-ext:lag-load-balance-method?  aggregation-load-balance-
method
       |     +--ro extr-lag-ext:port-speed?               identityref
       +--rw oc-vlan:routed-vlan
       |  +--rw oc-vlan:config
       |  |  +--rw oc-vlan:vlan?   union
       |  +--ro oc-vlan:state
       |  |  +--ro oc-vlan: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
       |  |  |     |  +--rw extr-ip-ext:secondary?     boolean
       |  |  |     |  +--rw extr-ip-ext:anycast-gateway? boolean
       |  |  |     +--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
       |  |  |        +--ro extr-ip-ext:secondary?     boolean
       |  |  |        +--ro extr-ip-ext:anycast-gateway? boolean
       |  |  |        +--ro extr-ip-ext:status?        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:config
       |  |  |  +--rw oc-ip:mtu?                         uint16
       |  |  |  +--rw extr-ip-ext:neighbor-reachabletime? uint16
       |  |  +--ro oc-ip:state
       |  |     +--ro oc-ip:mtu?                         uint16
       |  |     +--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
| |     +--ro extr-ip-ext:neighbor-reachabletime?   uint16
| +--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
|    |     |  +--rw extr-ip-ext:secondary?      boolean
|    |     |  +--rw extr-ip-ext:anycast-gateway?   boolean
|    |     |  +--rw extr-ip-ext:eui-64?         boolean
|    |     +--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
|    |        +--ro extr-ip-ext:secondary?      boolean
|    |        +--ro extr-ip-ext:anycast-gateway?   boolean
|    |        +--ro extr-ip-ext:eui-64?         boolean
|    +--rw oc-ip:router-advertisement
|    |  +--rw oc-ip:config
|    |  |  +--rw oc-ip:enable?               boolean
|    |  |  +--rw oc-ip:interval?             uint32
|    |  |  +--rw oc-ip:lifetime?             uint32
|    |  |  x--rw oc-ip:suppress?             boolean
|    |  |  +--rw oc-ip:mode?                 enumeration
|    |  |  +--rw oc-ip:managed?              boolean
|    |  |  +--rw oc-ip:other-config?         boolean
|    |  |  +--rw extr-ip-ext:min-interval?   uint32
|    |  |  +--rw extr-ip-ext:hop-limit?      uint8
|    |  +--ro oc-ip:state
|    |  |  +--ro oc-ip:enable?               boolean
|    |  |  +--ro oc-ip:interval?             uint32
|    |  |  +--ro oc-ip:lifetime?             uint32
|    |  |  x--ro oc-ip:suppress?             boolean
|    |  |  +--ro oc-ip:mode?                 enumeration
|    |  |  +--ro oc-ip:managed?              boolean
|    |  |  +--ro oc-ip:other-config?         boolean
|    |  |  +--ro extr-ip-ext:min-interval?   uint32
|    |  |  +--ro extr-ip-ext:hop-limit?      uint8
|    |  |  +--ro extr-ip-ext:last-ra-tx?     oc-types:timeticks64
|    |  |  +--ro extr-ip-ext:next-ra-tx?     oc-types:timeticks64
|    |  +--rw oc-ip:prefixes
|    |     +--rw oc-ip:prefix* [prefix]
|    |        +--rw oc-ip:prefix    -> ../config/prefix
|    |        +--rw oc-ip:config
|    |        |  +--rw oc-ip:prefix?                  oc-inet:ipv6-prefix
|    |        |  +--rw oc-ip:valid-lifetime?          uint32
|    |        |  +--rw oc-ip:preferred-lifetime?      uint32
|    |        |  +--rw oc-ip:disable-advertisement?       boolean
|    |        |  +--rw oc-ip:disable-autoconfiguration?   boolean
|    |        |  +--rw oc-ip:enable-onlink?           boolean
|    |        +--ro oc-ip:state
|    |           +--ro oc-ip:prefix?                  oc-inet:ipv6-prefix
```

```
|       |              +--ro oc-ip:valid-lifetime?              uint32
|       |              +--ro oc-ip:preferred-lifetime?          uint32
|       |              +--ro oc-ip:disable-advertisement?       boolean
|       |              +--ro oc-ip:disable-autoconfiguration?   boolean
|       |              +--ro oc-ip:enable-onlink?               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:config
|       |  +--rw oc-ip:mtu?                          uint32
|       |  +--rw oc-ip:dup-addr-detect-transmits?    uint32
|       |  +--rw extr-ip-ext:neighbor-reachabletime?  uint16
|       +--ro oc-ip:state
|          +--ro oc-ip:mtu?                          uint32
|          +--ro oc-ip:dup-addr-detect-transmits?    uint32
|          +--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
|          +--ro extr-ip-ext:neighbor-reachabletime?   uint16
+--rw oc-line-com:sonet
+--rw oc-tun:tunnel
|  +--rw oc-tun:config
|  |  +--rw oc-tun:src?           oc-inet:ip-address
|  |  +--rw oc-tun:dst?           oc-inet:ip-address
|  |  +--rw oc-tun:ttl?           uint8
|  |  +--rw extr-if-tun-ext:nve?  extr-overlay-net:base-nve-ref
|  +--ro oc-tun:state
|  |  +--ro oc-tun:src?                   oc-inet:ip-address
|  |  +--ro oc-tun:dst?                   oc-inet:ip-address
|  |  +--ro oc-tun:ttl?                   uint8
|  |  +--ro extr-if-tun-ext:nve?          extr-overlay-net:base-nve-ref
|  |  +--ro extr-if-tun-ext:config-source?   identityref
|  +--rw oc-tun:ipv4
|  |  +--rw oc-tun:addresses
|  |  |  +--rw oc-tun:address* [ip]
|  |  |     +--rw oc-tun:ip        -> ../config/ip
|  |  |     +--rw oc-tun:config
|  |  |     |  +--rw oc-tun:ip?                oc-inet:ipv4-address
|  |  |     |  +--rw oc-tun:prefix-length?  uint8
|  |  |     +--ro oc-tun:state
|  |  |        +--ro oc-tun:ip?                oc-inet:ipv4-address
|  |  |        +--ro oc-tun:prefix-length?  uint8
|  |  |        +--ro oc-tun:origin?           ip-address-origin
|  |  |        +--ro extr-ip-ext:secondary?  boolean
|  |  |        +--ro extr-ip-ext:status?     enumeration
```

```
|  |     +--rw oc-tun:neighbors
|  |  |  +--rw oc-tun:neighbor* [ip]
|  |  |     +--rw oc-tun:ip        -> ../config/ip
|  |  |     +--rw oc-tun:config
|  |  |     |  +--rw oc-tun:ip?                  oc-inet:ipv4-address
|  |  |     |  +--rw oc-tun:link-layer-address   oc-yang:phys-address
|  |  |     +--ro oc-tun:state
|  |  |        +--ro oc-tun:ip?                  oc-inet:ipv4-address
|  |  |        +--ro oc-tun:link-layer-address   oc-yang:phys-address
|  |  |        +--ro oc-tun:origin?              neighbor-origin
|  |  +--rw oc-tun:config
|  |  |  +--rw oc-tun:mtu?    uint16
|  |  +--ro oc-tun:state
|  |     +--ro oc-tun:mtu?        uint16
|  |     +--ro oc-tun:counters
|  |        +--ro oc-tun:in-pkts?               oc-yang:counter64
|  |        +--ro oc-tun:in-octets?             oc-yang:counter64
|  |        +--ro oc-tun:in-error-pkts?         oc-yang:counter64
|  |        +--ro oc-tun:in-forwarded-pkts?     oc-yang:counter64
|  |        +--ro oc-tun:in-forwarded-octets?   oc-yang:counter64
|  |        +--ro oc-tun:in-discarded-pkts?     oc-yang:counter64
|  |        +--ro oc-tun:out-pkts?              oc-yang:counter64
|  |        +--ro oc-tun:out-octets?            oc-yang:counter64
|  |        +--ro oc-tun:out-error-pkts?        oc-yang:counter64
|  |        +--ro oc-tun:out-forwarded-pkts?    oc-yang:counter64
|  |        +--ro oc-tun:out-forwarded-octets?  oc-yang:counter64
|  |        +--ro oc-tun:out-discarded-pkts?    oc-yang:counter64
|  +--rw oc-tun:ipv6
|  |  +--rw oc-tun:addresses
|  |  |  +--rw oc-tun:address* [ip]
|  |  |     +--rw oc-tun:ip        -> ../config/ip
|  |  |     +--rw oc-tun:config
|  |  |     |  +--rw oc-tun:ip?             oc-inet:ipv6-address
|  |  |     |  +--rw oc-tun:prefix-length   uint8
|  |  |     +--ro oc-tun:state
|  |  |        +--ro oc-tun:ip?             oc-inet:ipv6-address
|  |  |        +--ro oc-tun:prefix-length   uint8
|  |  |        +--ro oc-tun:origin?         ip-address-origin
|  |  |        +--ro oc-tun:status?         enumeration
|  |  +--rw oc-tun:neighbors
|  |  |  +--rw oc-tun:neighbor* [ip]
|  |  |     +--rw oc-tun:ip        -> ../config/ip
|  |  |     +--rw oc-tun:config
|  |  |     |  +--rw oc-tun:ip?                  oc-inet:ipv6-address
|  |  |     |  +--rw oc-tun:link-layer-address   oc-yang:phys-address
|  |  |     +--ro oc-tun:state
|  |  |        +--ro oc-tun:ip?                  oc-inet:ipv6-address
|  |  |        +--ro oc-tun:link-layer-address   oc-yang:phys-address
|  |  |        +--ro oc-tun:origin?              neighbor-origin
|  |  |        +--ro oc-tun:is-router?           boolean
|  |  |        +--ro oc-tun:neighbor-state?      enumeration
|  |  +--rw oc-tun:config
|  |  |  +--rw oc-tun:mtu?    uint32
|  |  +--ro oc-tun:state
|  |     +--ro oc-tun:mtu?        uint32
|  |     +--ro oc-tun:counters
|  |        +--ro oc-tun:in-pkts?               oc-yang:counter64
|  |        +--ro oc-tun:in-octets?             oc-yang:counter64
|  |        +--ro oc-tun:in-error-pkts?         oc-yang:counter64
|  |        +--ro oc-tun:in-forwarded-pkts?     oc-yang:counter64
|  |        +--ro oc-tun:in-forwarded-octets?   oc-yang:counter64
|  |        +--ro oc-tun:in-discarded-pkts?     oc-yang:counter64
|  |        +--ro oc-tun:out-pkts?              oc-yang:counter64
|  |        +--ro oc-tun:out-octets?            oc-yang:counter64
```

```
         | |         +--ro oc-tun:out-error-pkts?         oc-yang:counter64
         | |         +--ro oc-tun:out-forwarded-pkts?     oc-yang:counter64
         | |         +--ro oc-tun:out-forwarded-octets?   oc-yang:counter64
         | |         +--ro oc-tun:out-discarded-pkts?     oc-yang:counter64
         | +--ro extr-if-tun-ext:nexthops
         |    +--ro extr-if-tun-ext:nexthop* [ip vrf]
         |       +--ro extr-if-tun-ext:ip        -> ../state/ip
         |       +--ro extr-if-tun-ext:vrf       -> ../state/vrf
         |       +--ro extr-if-tun-ext:state
         |          +--ro extr-if-tun-ext:ip?              oc-inet:ip-address
         |          +--ro extr-if-tun-ext:vrf?             oc-ni:network-instance-ref
         |          +--ro extr-if-tun-ext:l3-interface?    oc-if:base-interface-ref
         |          +--ro extr-if-tun-ext:mac-address?     oc-yang:mac-address
         |          +--ro extr-if-tun-ext:l2-interface?    oc-if:base-interface-ref
         |          +--ro extr-if-tun-ext:bridge-domain?   oc-ni:network-instance-ref
         +--rw extr-mirror:mirrors
            +--rw extr-mirror:mirror* [name direction]
               +--rw extr-mirror:name         -> ../config/name
               +--rw extr-mirror:direction    -> ../config/direction
               +--rw extr-mirror:config
               | +--rw extr-mirror:name?        string
               | +--rw extr-mirror:direction?   identityref
               +--rw extr-mirror:state
                  +--rw extr-mirror:name?        string
                  +--rw extr-mirror:direction?   identityref

module: openconfig-ethernet-segments
  +--rw ethernet-segments
     +--rw ethernet-segment* [name]
        +--rw name            -> ../config/name
        +--rw config
        | +--rw name?             string
        | +--rw esi-type?         oc-evpn-types:esi-type
        | +--rw esi?              union
        | +--rw redundancy-mode?  identityref
        | +--rw interface?        -> /oc-if:interfaces/interface/name
        | +--rw subinterface?     -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
        +--ro state
        | +--ro name?             string
        | +--ro esi-type?         oc-evpn-types:esi-type
        | +--ro esi?              union
        | +--ro redundancy-mode?  identityref
        | +--ro interface?        -> /oc-if:interfaces/interface/name
        | +--ro subinterface?     -> /oc-if:interfaces/interface[oc-
if:name=current()/../interface]/subinterfaces/subinterface/index
        +--rw df-election
           +--rw config
           | +--rw df-election-method?   enumeration
           | +--rw preference?           uint16
           | +--rw revertive?            boolean
           | +--rw election-wait-time?   uint32
           +--ro state
              +--ro df-election-method?   enumeration
              +--ro preference?           uint16
              +--ro revertive?            boolean
              +--ro election-wait-time?   uint32

module: openconfig-routing-policy
  +--rw routing-policy
     +--rw defined-sets
     | +--rw prefix-sets
     | | +--rw prefix-set* [name]
     | |    +--rw name       -> ../config/name
```

```
|   |        +--rw config
|   |        |  +--rw name?    string
|   |        |  +--rw mode?    enumeration
|   |        +--ro state
|   |        |  +--ro name?    string
|   |        |  +--ro mode?    enumeration
|   |        +--rw prefixes
|   |           +--rw prefix* [ip-prefix masklength-range]
|   |              +--rw ip-prefix            -> ../config/ip-prefix
|   |              +--rw masklength-range     -> ../config/masklength-range
|   |              +--rw config
|   |              |  +--rw ip-prefix            oc-inet:ip-prefix
|   |              |  +--rw masklength-range?    string
|   |              +--ro state
|   |                 +--ro ip-prefix            oc-inet:ip-prefix
|   |                 +--ro masklength-range?    string
|   +--rw oc-bgp-pol:bgp-defined-sets
|      +--rw oc-bgp-pol:community-sets
|      |  +--rw oc-bgp-pol:community-set* [community-set-name]
|      |     +--rw oc-bgp-pol:community-set-name    -> ../config/community-set-name
|      |     +--rw oc-bgp-pol:config
|      |     |  +--rw oc-bgp-pol:community-set-name    string
|      |     |  +--rw oc-bgp-pol:community-member*     union
|      |     |  x--rw oc-bgp-pol:match-set-options?    oc-pol-types:match-set-options-
type
|      |     +--ro oc-bgp-pol:state
|      |        +--ro oc-bgp-pol:community-set-name    string
|      |        +--ro oc-bgp-pol:community-member*     union
|      |        x--ro oc-bgp-pol:match-set-options?    oc-pol-types:match-set-options-
type
|      +--rw oc-bgp-pol:ext-community-sets
|      |  +--rw oc-bgp-pol:ext-community-set* [ext-community-set-name]
|      |     +--rw oc-bgp-pol:ext-community-set-name    -> ../config/ext-community-
set-name
|      |     +--rw oc-bgp-pol:config
|      |     |  +--rw oc-bgp-pol:ext-community-set-name?    string
|      |     |  +--rw oc-bgp-pol:ext-community-member*      union
|      |     |  x--rw oc-bgp-pol:match-set-options?         oc-pol-types:match-set-
options-type
|      |     +--ro oc-bgp-pol:state
|      |        +--ro oc-bgp-pol:ext-community-set-name?    string
|      |        +--ro oc-bgp-pol:ext-community-member*      union
|      |        x--ro oc-bgp-pol:match-set-options?         oc-pol-types:match-set-
options-type
|      +--rw oc-bgp-pol:as-path-sets
|         +--rw oc-bgp-pol:as-path-set* [as-path-set-name]
|            +--rw oc-bgp-pol:as-path-set-name    -> ../config/as-path-set-name
|            +--rw oc-bgp-pol:config
|            |  +--rw oc-bgp-pol:as-path-set-name?     string
|            |  +--rw oc-bgp-pol:as-path-set-member*   string
|            +--ro oc-bgp-pol:state
|               +--ro oc-bgp-pol:as-path-set-name?     string
|               +--ro oc-bgp-pol:as-path-set-member*   string
+--rw policy-definitions
   +--rw policy-definition* [name]
      +--rw name          -> ../config/name
      +--rw config
      |  +--rw name?    string
      +--ro state
      |  +--ro name?    string
      +--rw statements
         +--rw statement* [name]
            +--rw name          -> ../config/name
            +--rw config
```

```
                    |  +--rw name?    string
                    +--ro state
                    |  +--ro name?    string
                    +--rw conditions
                    |  +--rw match-prefix-set
                    |  |  +--rw config
                    |  |  |  +--rw prefix-set?          -> ../../../../../../../../defined-
sets/prefix-sets/prefix-set/config/name
                    |  |  |  +--rw match-set-options?   oc-pol-types:match-set-options-
restricted-type
                    |  |  +--ro state
                    |  |     +--ro prefix-set?          -> ../../../../../../../../defined-
sets/prefix-sets/prefix-set/config/name
                    |  |     +--ro match-set-options?   oc-pol-types:match-set-options-
restricted-type
                    |  +--rw oc-isis-pol:isis-conditions
                    |  |  +--rw oc-isis-pol:config
                    |  |  |  +--rw oc-isis-pol:level-eq?   isis-types:level-number
                    |  |  +--ro oc-isis-pol:state
                    |  |     +--ro oc-isis-pol:level-eq?   isis-types:level-number
                    |  +--rw oc-ni-pol:match-protocol-instance
                    |  |  +--rw oc-ni-pol:config
                    |  |  |  +--rw oc-ni-pol:protocol-identifier?   identityref
                    |  |  |  +--rw oc-ni-pol:protocol-name?         string
                    |  |  +--ro oc-ni-pol:state
                    |  |     +--ro oc-ni-pol:protocol-identifier?   identityref
                    |  |     +--ro oc-ni-pol:protocol-name?         string
                    |  +--rw oc-ospf-pol:ospf-conditions
                    |  |  +--rw oc-ospf-pol:config
                    |  |  |  +--rw oc-ospf-pol:area-eq?   oc-ospf-types:ospf-area-identifier
                    |  |  +--ro oc-ospf-pol:state
                    |  |     +--ro oc-ospf-pol:area-eq?   oc-ospf-types:ospf-area-identifier
                    |  +--rw oc-bgp-pol:bgp-conditions
                    |     +--rw oc-bgp-pol:config
                    |     |  +--rw oc-bgp-pol:med-eq?            uint32
                    |     |  +--rw oc-bgp-pol:origin-eq?         oc-bgp-types:bgp-origin-
attr-type
                    |     |  +--rw oc-bgp-pol:next-hop-in*       union
                    |     |  +--rw oc-bgp-pol:afi-safi-in*       identityref
                    |     |  +--rw oc-bgp-pol:local-pref-eq?     uint32
                    |     |  +--rw oc-bgp-pol:route-type?        enumeration
                    |     |  x--rw oc-bgp-pol:community-set?     -> /oc-rpol:routing-
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/community-sets/community-set/community-
set-name
                    |     |  x--rw oc-bgp-pol:ext-community-set?   -> /oc-rpol:routing-
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/ext-community-sets/ext-community-set/ext-
community-set-name
                    |     +--ro oc-bgp-pol:state
                    |     |  +--ro oc-bgp-pol:med-eq?            uint32
                    |     |  +--ro oc-bgp-pol:origin-eq?         oc-bgp-types:bgp-origin-
attr-type
                    |     |  +--ro oc-bgp-pol:next-hop-in*       union
                    |     |  +--ro oc-bgp-pol:afi-safi-in*       identityref
                    |     |  +--ro oc-bgp-pol:local-pref-eq?     uint32
                    |     |  +--ro oc-bgp-pol:route-type?        enumeration
                    |     |  x--ro oc-bgp-pol:community-set?     -> /oc-rpol:routing-
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/community-sets/community-set/community-
set-name
                    |     |  x--ro oc-bgp-pol:ext-community-set?   -> /oc-rpol:routing-
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/ext-community-sets/ext-community-set/ext-
community-set-name
                    |     +--rw oc-bgp-pol:match-as-path-set
                    |        +--rw oc-bgp-pol:config
                    |        |  +--rw oc-bgp-pol:as-path-set?          -> /oc-rpol:routing-
```

```
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/as-path-sets/as-path-set/as-path-set-name
                |         | +--rw oc-bgp-pol:match-set-options?   oc-pol-types:match-set-
options-type
                |         +--ro oc-bgp-pol:state
                |            +--ro oc-bgp-pol:as-path-set?         -> /oc-rpol:routing-
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/as-path-sets/as-path-set/as-path-set-name
                |            +--ro oc-bgp-pol:match-set-options?   oc-pol-types:match-set-
options-type
                +--rw actions
                   +--rw config
                   | +--rw policy-result?   policy-result-type
                   +--ro state
                   | +--ro policy-result?   policy-result-type
                   +--rw oc-isis-pol:isis-actions
                   | +--rw oc-isis-pol:config
                   | | +--rw oc-isis-pol:set-level?         isis-types:level-number
                   | | +--rw oc-isis-pol:set-metric-type?   isis-types:metric-type
                   | | +--rw oc-isis-pol:set-metric?        isis-types:wide-metric
                   | +--ro oc-isis-pol:state
                   |    +--ro oc-isis-pol:set-level?         isis-types:level-number
                   |    +--ro oc-isis-pol:set-metric-type?   isis-types:metric-type
                   |    +--ro oc-isis-pol:set-metric?        isis-types:wide-metric
                   +--rw oc-ospf-pol:ospf-actions
                   | +--rw oc-ospf-pol:config
                   | | +--rw oc-ospf-pol:set-area?   oc-ospf-types:ospf-area-identifier
                   | +--ro oc-ospf-pol:state
                   | | +--ro oc-ospf-pol:set-area?   oc-ospf-types:ospf-area-identifier
                   | +--rw oc-ospf-pol:set-metric
                   |    +--rw oc-ospf-pol:config
                   |    | +--rw oc-ospf-pol:metric-type?   enumeration
                   |    | +--rw oc-ospf-pol:metric?        oc-ospf-types:ospf-metric
                   |    +--ro oc-ospf-pol:state
                   |       +--ro oc-ospf-pol:metric-type?   enumeration
                   |       +--ro oc-ospf-pol:metric?        oc-ospf-types:ospf-metric
                   +--rw oc-bgp-pol:bgp-actions
                      +--rw oc-bgp-pol:config
                      | +--rw oc-bgp-pol:set-route-origin?   oc-bgp-types:bgp-origin-
attr-type
                      | +--rw oc-bgp-pol:set-local-pref?     uint32
                      | +--rw oc-bgp-pol:set-next-hop?       bgp-next-hop-type
                      | +--rw oc-bgp-pol:set-med?            bgp-set-med-type
                      +--ro oc-bgp-pol:state
                      | +--ro oc-bgp-pol:set-route-origin?   oc-bgp-types:bgp-origin-
attr-type
                      | +--ro oc-bgp-pol:set-local-pref?     uint32
                      | +--ro oc-bgp-pol:set-next-hop?       bgp-next-hop-type
                      | +--ro oc-bgp-pol:set-med?            bgp-set-med-type
                      +--rw oc-bgp-pol:set-as-path-prepend
                      | +--rw oc-bgp-pol:config
                      | | +--rw oc-bgp-pol:repeat-n?   uint8
                      | | +--rw oc-bgp-pol:asn?        oc-inet:as-number
                      | +--ro oc-bgp-pol:state
                      |    +--ro oc-bgp-pol:repeat-n?   uint8
                      |    +--ro oc-bgp-pol:asn?        oc-inet:as-number
                      +--rw oc-bgp-pol:set-community
                      | +--rw oc-bgp-pol:config
                      | | +--rw oc-bgp-pol:method?    enumeration
                      | | +--rw oc-bgp-pol:options?   bgp-set-community-option-type
                      | +--ro oc-bgp-pol:state
                      | | +--ro oc-bgp-pol:method?    enumeration
                      | | +--ro oc-bgp-pol:options?   bgp-set-community-option-type
                      | +--rw oc-bgp-pol:reference
                      |    +--rw oc-bgp-pol:config
                      |    | x--rw oc-bgp-pol:community-set-ref?   -> /oc-rpol:routing-
```

```
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/community-sets/community-set/community-
set-name
                      |     +--ro oc-bgp-pol:state
                      |        x--ro oc-bgp-pol:community-set-ref?   -> /oc-rpol:routing-
policy/defined-sets/oc-bgp-pol:bgp-defined-sets/community-sets/community-set/community-
set-name
                      +--rw oc-bgp-pol:set-ext-community
                         +--rw oc-bgp-pol:config
                         |  +--rw oc-bgp-pol:method?    enumeration
                         |  +--rw oc-bgp-pol:options?   bgp-set-community-option-type
                         +--ro oc-bgp-pol:state
                         |  +--ro oc-bgp-pol:method?    enumeration
                         |  +--ro oc-bgp-pol:options?   bgp-set-community-option-type
                         +--rw oc-bgp-pol:reference
                            +--rw oc-bgp-pol:config
                            |  x--rw oc-bgp-pol:ext-community-set-ref?   -> /oc-
rpol:routing-policy/defined-sets/oc-bgp-pol:bgp-defined-sets/ext-community-sets/ext-
community-set/ext-community-set-name
                            +--ro oc-bgp-pol:state
                               x--ro oc-bgp-pol:ext-community-set-ref?   -> /oc-
rpol:routing-policy/defined-sets/oc-bgp-pol:bgp-defined-sets/ext-community-sets/ext-
community-set/ext-community-set-name

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
     |  +--rw extr-lldp-ext:management-address?  oc-inet:ip-address
     +--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 frame-error-in?    yang:counter64
     |  |  +--ro frame-discard?     yang:counter64
     |  |  +--ro tlv-discard?       yang:counter64
     |  |  +--ro tlv-unknown?       yang:counter64
     |  |  +--ro last-clear?        yang:date-and-time
     |  |  +--ro tlv-accepted?      yang:counter64
     |  |  +--ro entries-aged-out?  yang:counter64
     |  +--ro extr-lldp-ext:holdtime?         uint16
     |  +--ro extr-lldp-ext:transmit?         boolean
     |  +--ro extr-lldp-ext:receive?          boolean
     |  +--ro extr-lldp-ext:management-address?  oc-inet:ip-address
     +--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
|  +--rw extr-lldp-ext:management-address?               oc-inet:ip-address
|  +--rw extr-lldp-ext:suppress-tlv-advertisement*       identityref
+--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 frame-error-in?     yang:counter64
|  |  +--ro frame-discard?      yang:counter64
|  |  +--ro tlv-discard?        yang:counter64
|  |  +--ro tlv-unknown?        yang:counter64
|  |  +--ro last-clear?         yang:date-and-time
|  |  +--ro frame-error-out?    yang:counter64
|  +--ro extr-lldp-ext:transmit?                         boolean
|  +--ro extr-lldp-ext:receive?                          boolean
|  +--ro extr-lldp-ext:management-address?               oc-inet:ip-address
|  +--ro extr-lldp-ext:suppress-tlv-advertisement*       identityref
+--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 custom-tlvs
|     |  +--ro tlv* [type oui oui-subtype]
|     |     +--ro type                       -> ../state/type
|     |     +--ro oui                        -> ../state/oui
|     |     +--ro oui-subtype                -> ../state/oui-subtype
|     |     +--ro config
|     |     +--ro state
|     |     |  +--ro type?         int32
|     |     |  +--ro oui?          string
|     |     |  +--ro oui-subtype?  string
|     |     |  +--ro value?        binary
|     |     +--ro extr-lldp-ext:addresses
|     |        +--ro extr-lldp-ext:address* [ip]
|     |           +--ro extr-lldp-ext:ip        -> ../state/ip
|     |           +--ro extr-lldp-ext:state
|     |              +--ro extr-lldp-ext:ip?          oc-inet:ip-address
|     |              +--ro extr-lldp-ext:isis-state?  string
|     +--ro capabilities
|        +--ro capability* [name]
|           +--ro name       -> ../state/name
|           +--ro config
|           +--ro state
|              +--ro name?      identityref
|              +--ro enabled?   boolean
+--rw extr-lldp-ext:fabric-extend
```

```
                +--rw extr-lldp-ext:config
                | +--rw extr-lldp-ext:enabled?                  boolean
                | +--rw extr-lldp-ext:mtu?                      uint16
                | +--rw extr-lldp-ext:advertise-fabric-ip?      oc-inet:ip-address
                | +--rw extr-lldp-ext:prefix-length?           uint8
                | +--rw extr-lldp-ext:authentication-password?  oc-types:routing-password
                +--ro extr-lldp-ext:state
                | +--ro extr-lldp-ext:enabled?                  boolean
                | +--ro extr-lldp-ext:mtu?                      uint16
                | +--ro extr-lldp-ext:advertise-fabric-ip?      oc-inet:ip-address
                | +--ro extr-lldp-ext:prefix-length?           uint8
                | +--ro extr-lldp-ext:authentication-password?  oc-types:routing-password
                +--rw extr-lldp-ext:remote-neighbors
                   +--rw extr-lldp-ext:remote-neighbor* [name]
                      +--rw extr-lldp-ext:name       -> ../config/name
                      +--rw extr-lldp-ext:config
                      | +--rw extr-lldp-ext:name?          string
                      | +--rw extr-lldp-ext:ip?            oc-inet:ip-address
                      | +--rw extr-lldp-ext:isis-metric?   uint32
                      +--ro extr-lldp-ext:state
                         +--ro extr-lldp-ext:name?          string
                         +--ro extr-lldp-ext:ip?            oc-inet:ip-address
                         +--ro extr-lldp-ext:isis-metric?   uint32
                         +--ro extr-lldp-ext:status?        boolean

module: extreme-load-balance
  +--rw load-balance
     +--rw ethernet
     | +--rw config
     | | +--rw load-balancing-method*   ethernet-load-balancing-method
     | +--ro state
     |    +--ro load-balancing-method*   ethernet-load-balancing-method
     +--rw ip
     | +--rw config
     | | +--rw load-balancing-method*   ip-load-balancing-method
     | +--ro state
     |    +--ro load-balancing-method*   ip-load-balancing-method
     +--rw ipv6
        +--rw config
        | +--rw load-balancing-method*   ipv6-load-balancing-method
        +--ro state
           +--ro load-balancing-method*   ipv6-load-balancing-method

module: extreme-mirror
  +--rw mirrors
     +--rw mirror* [name]
        +--rw name                -> ../config/name
        +--rw config
        | +--rw name?          string
        | +--rw description?   string
        +--ro state
        | +--ro name?          string
        | +--ro description?   string
        | +--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

module: extreme-overlay-networks
  +--rw overlay-networks
```

```
      +--rw config
      | +--rw default-nve?           string
      | +--rw default-vni-offset?    uint32
      +--ro state
      | +--ro default-nve?           string
      | +--ro default-vni-offset?    uint32
      +--rw nvos
      | +--rw nvo* [name]
      |    +--rw name        -> ../config/name
      |    +--rw config
      |    | +--rw name?            string
      |    | +--rw member-nves*     string
      |    | +--rw vni-domain?      string
      |    | +--rw split-horizon?   string
      |    +--ro state
      |       +--ro name?            string
      |       +--ro member-nves*     string
      |       +--ro vni-domain?      string
      |       +--ro split-horizon?   string
      +--rw nves
      | +--rw nve* [name]
      |    +--rw name       -> ../config/name
      |    +--rw config
      |    | +--rw name?                 string
      |    | +--rw source-interface?     string
      |    | +--rw source-subinterface?  uint32
      |    +--ro state
      |       +--ro name?                 string
      |       +--ro source-interface?     string
      |       +--ro source-subinterface?  uint32
      |       +--ro oper-status-ipv6?     identityref
      |       +--ro oper-status-ipv4?     identityref
      |       +--ro source-ipv4?          oc-inet:ip-address
      |       +--ro source-ipv6?          oc-inet:ip-address
      +--rw vni-domains
         +--rw vni-domain* [name]
            +--rw name       -> ../config/name
            +--rw config
            | +--rw name?         string
            | +--rw auto-offset?  uint32
            +--ro state
               +--ro name?         string
               +--ro auto-offset?  uint32

module: extreme-mlag
  +--rw mlag
     +--rw config
     | +--rw keepalive-interval?    uint32
     | +--rw keepalive-multiplier?  uint16
     | +--rw keepalive-delay?       uint32
     | +--rw role?                  mlag-role-type
     | +--rw mac?                   oc-yang:mac-address
     | +--rw bringup-delay?         uint32
     +--ro state
     | +--ro keepalive-interval?    uint32
     | +--ro keepalive-multiplier?  uint16
     | +--ro keepalive-delay?       uint32
     | +--ro role?                  mlag-role-type
     | +--ro mac?                   oc-yang:mac-address
     | +--ro bringup-delay?         uint32
     +--rw peers
     | +--rw peer* [name]
     |    +--rw name          -> ../config/name
     |    +--rw config
```

```
|     |  +--rw name?                  string
|     |  +--rw extend-netinst-mode?   enumeration
|     |  +--rw extend-net-instances*  oc-ni:network-instance-ref
|     +--ro state
|     |  +--ro name?                  string
|     |  +--ro extend-netinst-mode?   enumeration
|     |  +--ro extend-net-instances*  oc-ni:network-instance-ref
|     |  +--ro mcp-state?             mlag-entity-state
|     |  +--ro peer-state?            mlag-entity-state
|     |  +--ro role?                  mlag-role-type
|     |  +--ro mac?                   oc-yang:mac-address
|     |  +--ro exception-state?       string
|     |  +--ro counters
|     |     +--ro mcp-transitions?   oc-yang:counter64
|     |     +--ro restarts?          oc-yang:counter64
|     |     +--ro last-clear?        oc-types:timeticks64
|     +--rw keepalives
|        +--rw keepalive* [name]
|           +--rw name      -> ../config/name
|           +--rw config
|           |  +--rw name?             string
|           |  +--rw type?             mlag-keepalive-type
|           |  +--rw local-interface?  oc-if:base-interface-ref
|           |  +--rw remote-address?   oc-inet:ip-address
|           |  +--rw address-type?     keepalive-address-type
|           +--ro state
|              +--ro name?             string
|              +--ro type?             mlag-keepalive-type
|              +--ro local-interface?  oc-if:base-interface-ref
|              +--ro remote-address?   oc-inet:ip-address
|              +--ro address-type?     keepalive-address-type
|              +--ro keepalive-state?  mlag-entity-state
|              +--ro fail-reason?      string
|              +--ro local-address?    oc-inet:ip-address
|              +--ro first-rx?         oc-types:timeticks64
|              +--ro last-rx?          oc-types:timeticks64
|              +--ro counters
|              |  +--ro rx?                        oc-yang:counter64
|              |  +--ro tx?                        oc-yang:counter64
|              |  +--ro last-clear?                oc-types:timeticks64
|              |  +--ro num-keepalive-transitions? oc-yang:counter64
|              +--ro bfd
|                 +--ro session-Id?      uint32
|                 +--ro profile?         extr-bfd-ext:profile-ref
|                 +--ro session-status?  uint8
+--rw interfaces
|  +--rw interface* [name]
|     +--rw name       -> ../config/name
|     +--rw config
|     |  +--rw name?        oc-if:base-interface-ref
|     |  +--rw auto?        boolean
|     |  +--rw identifier?  uint32
|     +--ro state
|     |  +--ro name?        oc-if:base-interface-ref
|     |  +--ro auto?        boolean
|     |  +--ro identifier?  uint32
|     +--rw peers
|        +--rw peer* [name]
|           +--rw name      -> /mlag/peers/peer/config/name
|           +--rw config
|           |  +--rw name?   string
|           +--ro state
|              +--ro name?              string
|              +--ro intf-state?        mlag-entity-state
```

```
|                  +--ro remote-intf-state?   mlag-entity-state
|                  +--ro cfg-members?          uint16
|                  +--ro active-members?       uint16
|                  +--ro fail-reason?          string
|                  +--ro counters
|                     +--ro num-peer-transitions?   oc-yang:counter64
+--rw uplink-track-interfaces
   +--rw uplink-track-interface* [name]
      +--rw name      -> ../config/name
      +--rw config
      | +--rw name?   oc-if:base-interface-ref
      +--ro state
         +--ro name?   oc-if:base-interface-ref
```