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Network OS YANG

Reference Manual

Supporting Network OS v4.1.0

BROCADE

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About This Document

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How this document is organized

This document is organized to help you find the information that you want as quickly and easily as possible.

The document contains the following components:

- [Chapter 1, “Using YANG”](#) introduces the YANG language and provides information about how to use this manual.
- [Chapter 2, “YANG Modules”](#) provides an overview and structural details for each YANG module.
- [Appendix A, “Custom RPCs”](#) lists the custom RPCs defined in the YANG modules and identifies the host module for each.
- [Appendix B, “Actions”](#) lists the functions implemented by proprietary actions in the YANG modules.

Supported hardware and software

Although many different software and hardware configurations are tested and supported by Brocade Communications Systems, Inc. for Network OS v4.1.0, documenting all possible configurations and scenarios is beyond the scope of this document.

The following hardware platforms are supported by this release of Network OS.

- Brocade VDX 6710
- Brocade VDX 6720
- Brocade VDX 6730
- Brocade VDX 6740

- Brocade VDX 6740T
- Brocade VDX 8770-4
- Brocade VDX 8770-8

Document conventions

This section describes text formatting conventions and important notice formats used in this document.

Text formatting

The narrative-text formatting conventions that are used are as follows:

bold text	Identifies command names Identifies the names of user-manipulated GUI elements Identifies keywords and operands Identifies text to enter at the GUI or CLI
<i>italic text</i>	Provides emphasis Identifies variables Identifies paths and Internet addresses Identifies document titles
<code>code text</code>	Identifies CLI output Identifies command syntax examples

Notes, cautions, and warnings

The following notices and statements are used in this manual. They are listed below in order of increasing severity of potential hazards.

NOTE

A note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.

ATTENTION

An Attention statement indicates potential damage to hardware or data.



CAUTION

A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.



DANGER

A Danger statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations.

Key terms

For definitions specific to Brocade and Fibre Channel, see the technical glossaries on MyBrocade. See “[Brocade resources](#)” on page x for instructions on accessing MyBrocade.

For definitions of SAN-specific terms, visit the Storage Networking Industry Association online dictionary at:

<http://www.snia.org/education/dictionary>

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Oracle Corporation	Oracle, Java
Netscape Communications Corporation	Netscape
Red Hat, Inc.	Red Hat, Red Hat Network, Maximum RPM, Linux Undercover

Additional information

This section lists additional Brocade and industry-specific documentation that you might find helpful.

Brocade resources

To get up-to-the-minute information, go to <http://my.brocade.com> to register at no cost for a user ID and password.

White papers, online demonstrations, and data sheets are available through the Brocade website at:

<http://www.brocade.com/products-solutions/products/index.page>

For additional Brocade documentation, visit the Brocade website:

<http://www.brocade.com>

Release notes are available on the MyBrocade website.

Other industry resources

For additional resource information, visit the Technical Committee T11 website. This website provides interface standards for high-performance and mass storage applications for Fibre Channel, storage management, and other applications:

<http://www.t11.org>

For information about the Fibre Channel industry, visit the Fibre Channel Industry Association website:

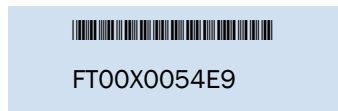
<http://www.fibrechannel.org>

Getting technical help

Contact your switch support supplier for hardware, firmware, and software support, including product repairs and part ordering. To expedite your call, have the following information available:

1. General Information
 - Switch model
 - Switch operating system version
 - Software name and software version, if applicable
 - Error numbers and messages received
 - **supportSave** command output
 - Detailed description of the problem, including the switch or fabric behavior immediately following the problem, and specific questions
 - Description of any troubleshooting steps already performed and the results
 - Serial console and Telnet session logs
 - syslog message logs
2. Switch Serial Number

The switch serial number and corresponding bar code are provided on the serial number label, as illustrated below:



The serial number label is located on the switch ID pull-out tab located on the bottom of the port side of the switch.

Document feedback

Quality is our first concern at Brocade and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. Forward your feedback to:

documentation@brocade.com

Provide the title and version number of the document and as much detail as possible about your comment, including the topic heading and page number and your suggestions for improvement.

Using YANG

In this chapter

- [Yang overview](#) 1
- [Using the Network OS YANG Reference Manual](#) 1

Yang overview

YANG is a data modeling language. It is used to model configuration and state data for manipulation by the Network Configuration Protocol (NETCONF) using NETCONF remote procedure calls (RPCs).

Refer to *RFC 6020, YANG - A Data Modeling Language for the Network Configuration Protocol (NETCONF)* for full; details of how to use YANG, and for a reference of all the features of the YANG language.

Using the Network OS YANG Reference Manual

This manual provides a reference for YANG modules supported by Network OS v4.1.0.

Each module provides a data model for a specific part of the system. It models the data using one or more of the following entities:

- Top-level nodes and their subtrees
- Subtrees that augment nodes in other YANG modules
- Custom RPCs
- Custom actions that make use of the proprietary action mechanism

For each module, this manual provides a high-level description of what the module does. It also provides the structure of each top-level node, external augmentation, custom RPC, and action.

The **pyang** command with the **-f tree** option is used to illustrate the YANG code. This utility resolves the uses and augments statements to provide an easy-to-read view of the structure of the YANG code. The following example shows part of the brocade-interface module.

```

module: brocade-interface
  +---rw interface
  |   +---rw fc-port [name]
  |       +---rw name                interface-type
  |       +---rw fc-speed-cfg?       fc-speed-cfg-type
  |       +---rw fill-word?          fc-fillword-cfg-type
  |       +---rw long-distance?      fc-long-distance-cfg-type
  |       +---rw vc-link-init?       fc-vc-link-init-cfg-type
  |       +---rw desire-distance?    desire-distance-type
  |       +---rw isl-r_rdy-mode?     empty

```

1 Using the Network OS YANG Reference Manual

```

|   +--rw trunk-enable?   empty
|   +--rw shutdown?      empty

```

In addition to showing the structure, the output of the `pyang -f tree` command provides information about each node, as shown in [Figure 1](#).

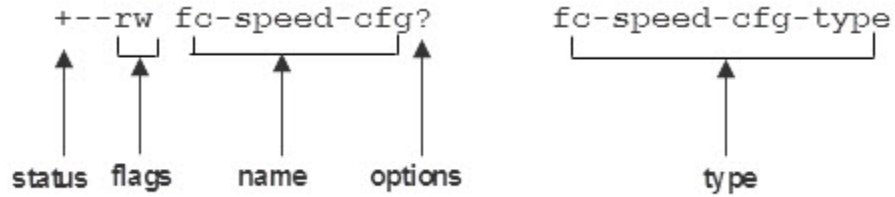


FIGURE 1 Syntax of pyang output

Field definitions and possible values follow:

status	Status of the node can be one of the following values: + Current x Deprecated o Obsolete
flags	The type of information can be one of the following values: rw Read-write—The node contains configuration data ro Read-only—The node contains operational data -x RPC statement -n Notification (not supported)
name	The name of the node can be further modified by one of the following values: (name) Choice node :(name) Case node prefix:name Augmented from external module
options	The following optional values can be used: ? Optional leaf or presence container * Leaf list [keys] Keys for a list
type	The type of the leaf or leaf-list. If the specified type is other than one of the basic types, then the type is defined in a typedef statement in the .yang file.

YANG Modules

brocade-aaa

Description Provides a data model for configuring authentication, authorization, and accounting (AAA). This module supports authentication performed by a local, RADIUS, TACACS, or LDAP server.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-aaa
  +--rw aaa-config
  |   +--rw aaa
  |   |   +--rw authentication
  |   |   |   +--rw login
  |   |   |   |   +--rw first?    enumeration
  |   |   |   |   +--rw second?  enumeration
  |   |   +--rw accounting
  |   |   |   +--rw exec
  |   |   |   |   +--rw defaultacc
  |   |   |   |   |   +--rw start-stop
  |   |   |   |   |   |   +--rw server-type?  acc_srv_type
  |   |   +--rw commands
  |   |   |   +--rw defaultacc
  |   |   |   |   +--rw start-stop
  |   |   |   |   |   +--rw server-type?  acc_srv_type
  +--rw username [name]
  |   +--rw name          string
  |   +--rw user-password user-passwd
  |   +--rw encryption-level? enumeration
  |   +--rw role          string
  |   +--rw desc?         string
  |   +--rw enable?      username-enable
  |   +--rw expire?      date
  +--rw service
  |   +--rw password-encryption? empty
  +--rw user
  +--rw role
  |   +--rw name [name]
  |   |   +--rw name    string
  |   |   +--rw desc?  string
  +--rw radius-server
  |   +--rw host [hostname]
  |   |   +--rw hostname    string
  |   |   +--rw auth-port?  rad-auth-port
  |   |   +--rw protocol?   rad-auth-protocols
  |   |   +--rw key?        string
  |   |   +--rw encryption-level? enumeration
  |   |   +--rw retries?    uint32
  |   |   +--rw timeout?    uint32
  +--rw tacacs-server
  |   +--rw host [hostname]
  |   |   +--rw hostname    string

```

```

    +--rw port?                tac-auth-port
    +--rw protocol?           tac-auth-protocols
    +--rw key?                 string
    +--rw encryption-level?   enumeration
    +--rw retries?            uint8
    +--rw timeout?            uint8
+--rw ldap-server
  +--rw host [hostname]
  | +--rw hostname            string
  | +--rw port?              ldap-auth-port
  | +--rw retries?           uint8
  | +--rw timeout?           uint8
  | +--rw basedn?            string
  +--rw maprole
    +--rw group [ad-group]
      +--rw ad-group          string
      +--rw switch-role      string
+--rw password-attributes
  +--rw min-length?           uint32
  +--rw max-retry?            uint32
  +--rw character-restriction
  | +--rw upper?              uint32
  | +--rw lower?              uint32
  | +--rw numeric?            uint32
  | +--rw special-char?      uint32
  +--rw admin-lockout-enable? empty
+--rw banner
  +--rw login?                string
  +--rw motd?                  string
  +--rw incoming?             string
+--rw rule [index]
  +--rw index                  uint32
  +--rw action?                rule-action
  +--rw operation?             rule-operation
  +--rw role?                  string
  +--rw command
    +--rw (cmdlist)?
      +--:(container-cmds)
      | +--rw enumList?        enumeration
      +--:(interface-a)
      | +--rw interface-int
      |   +--rw interface-cont?
      +--:(interface-b)
      | +--rw interface-fcoe
      |   +--rw interface
      |     +--rw fcoe-cont?
      +--:(interface-c)
      | +--rw interface-te
      |   +--rw interface
      |     +--rw tengigabitethernet-cont?
      +--:(interface-d)
      | +--rw interface-fcoe-leaf
      |   +--rw interface
      |     +--rw fcoe-leaf?   string
      +--:(interface-e)
      | +--rw interface-te-leaf
      |   +--rw interface
      |     +--rw tengigabitethernet-leaf? string
      +--:(interface-f)
      | +--rw interface-mgmt

```



```

|         +--rw interface
|           +--rw management-cont?
+---:(interface-g)
|   +--rw interface-ge
|     +--rw interface
|       +--rw gigabitethernet-cont?
+---:(interface-h)
|   +--rw interface-ge-leaf
|     +--rw interface
|       +--rw gigabitethernet-leaf?  string
+---:(interface-i)
|   +--rw interface-pc
|     +--rw interface
|       +--rw port-channel-cont?
+---:(interface-j)
|   +--rw interface-pc-leaf
|     +--rw interface
|       +--rw port-channel-leaf?  string
+---:(interface-k)
|   +--rw interface-vlan
|     +--rw interface
|       +--rw vlan-cont?
+---:(interface-l)
|   +--rw interface-vlan-leaf
|     +--rw interface
|       +--rw vlan-leaf?  string
+---:(copy-a)
|   +--rw copy-cp
|     +--rw copy-cont?
+---:(copy-b)
|   +--rw copy-running
|     +--rw copy
|       +--rw running-config-cont?
+---:(copy-c)
|   +--rw copy-support
|     +--rw copy
|       +--rw support-cp?
+---:(clear-a)
|   +--rw clear-cl
|     +--rw clear-cont?
+---:(clear-b)
|   +--rw clear-logging
|     +--rw clear
|       +--rw logging-cont?
+---:(clear-c)
|   +--rw clear-support
|     +--rw clear
|       +--rw support-cl?
+---:(protocol-a)
|   +--rw protocol-pr
|     +--rw protocol-cont?
+---:(protocol-b)
|   +--rw protocol-spanning
|     +--rw protocol
|       +--rw spanning-tree-cont?
+---:(protocol-c)
|   +--rw protocol-lldp
|     +--rw protocol
|       +--rw lldp-cont?
+--rw alias-config

```

2 brocade-aaa

```
    +--rw alias [name]
    |   +--rw name      string
    |   +--rw expansion string
    +--rw user [name]
    |   +--rw name      string
    |   +--rw alias [name]
    |       +--rw name      string
    |       +--rw expansion string
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw clear
  |   +--rw brcd-aaa:login
```

RPCs None

Actions Proprietary actions defined in this module follow.

Unlock a user account:

```
module: brocade-aaa
  +--rw user
  |   +--ro unlock
  |   |   +--ro input
  |   |   |   +--ro username      string
  |   |   |   +--ro rbridge-id?  common-def:rbridge-id-all-type
  |   |   +--ro output
  |   |       +--ro Result?      string
  module: brocade-common-def
    +--rw clear
    |   +--rw brcd-aaa:login
    |   |   +--ro brcd-aaa:sessions
    |   |   +--ro brcd-aaa:input
    |   |   |   +--ro brcd-aaa:rbridge-id?  common-def:rbridge-id-all-type
    |   |   +--ro brcd-aaa:output
```

brocade-aaa-ext

Description Provides extensions to the brocade-aaa module for returning operational state information.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw aaa-extensions:aaa-users
```

RPCs Custom RPCs defined in this module follow.

Return user information:

```
+---x user-session-info
  +--ro output
  +--ro user-role?  string
```

Actions Proprietary actions defined in this module follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw aaa-extensions:aaa-users
  |   |   +--ro aaa-extensions:users
  |   |   +--ro aaa-extensions:input
  |   |   +--ro aaa-extensions:rbridge-id?  common-def:rbridge-id-all-type
```

brocade-ag

Description Provides a data model for managing Access Gateway.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow:

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw ag:ag
      | +--rw ag:nport-menu
      | | +--rw ag:nport-interface
      | |   +--rw ag:nport [agNPortNb]
      | |     +--rw ag:agNPortNb   nport-interfaces-type
      | |     +--rw ag:map
      | |       +--rw ag:map-fport
      | |         +--rw ag:map-fport-interface
      | |           +--rw ag:map-fcoe*   fport-interfaces-type
      | +--rw ag:pg [pgid]
      | | +--rw ag:pgid   pgid-type
      | | +--rw ag:nport
      | | | +--rw ag:pg-nport-interface
      | | | | +--rw ag:nports*   nport-interfaces-type
      | | | +--rw ag:modes*   pg-policy-types
      | | | +--rw ag:rename?   string
      | +--rw ag:timeout
      | | +--rw ag:fnmtovalue?   uint32
      | +--rw ag:counter
      | | +--rw ag:reliabilitycountervalue?   uint32

```

RPCs None

Actions None

brocade-arp

Description Provides a data model for managing the Address Resolution Protocol (ARP).

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-arp
  +--rw hide-arp-holder
    o--rw system-max
      | +--rw arp? uint32
    +--rw arp-entry [arp-ip-address]
      +--rw arp-ip-address inet:ipv4-address
      +--rw mac-address-value? mac-access-list:mac-address-type
      +--rw interfacename? enumeration
      +--rw (interfacetype)?
        +--:(GigabitEthernet)
          | +--rw GigabitEthernet? interface:interface-type
        +--:(TenGigabitEthernet)
          | +--rw TenGigabitEthernet? interface:interface-type
        +--:(FortyGigabitEthernet)
          | +--rw FortyGigabitEthernet? interface:interface-type
        +--:(HundredGigabitEthernet)
          | +--rw HundredGigabitEthernet? interface:interface-type
        +--:(Ve)
          +--rw Ve? interface:vlan-type
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw vrf:vrf [vrf-name]
      | +--rw vrf:address-family
      | | +--rw arp:arp-entry [arp-ip-address]
      | | | +--rw arp:arp-ip-address inet:ipv4-address
      | | | +--rw arp:mac-address-value?
    mac-access-list:mac-address-type
      | | | +--rw arp:interfacename? enumeration
      | | | +--rw (interfacetype)?
      | | | +--:(GigabitEthernet)
      | | | | +--rw arp:GigabitEthernet? interface:interface-type
      | | | | +--:(TenGigabitEthernet)
      | | | | +--rw arp:TenGigabitEthernet?
    interface:interface-type
      | | | +--:(FortyGigabitEthernet)
      | | | | +--rw arp:FortyGigabitEthernet?
    interface:interface-type
      | | | +--:(HundredGigabitEthernet)
      | | | | +--rw arp:HundredGigabitEthernet?
    interface:interface-type
      | | | +--:(Ve)
      | | | | +--rw arp:Ve? interface:vlan-type
  
```

RPCs Custom RPCs defined in this module follow.

Return ARP entries of the managed entity:

```

+---x get-arp
  +--ro input
  | +--ro (input-type)?
  | +--:(interface)
  
```

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```
|     | +--ro interface-type?  enumeration
|     | +--ro interface-name?  union
|     +---:(dynamic)
|     | +--ro dynamic?        empty
|     +---:(static)
|     | +--ro static?         empty
|     +---:(ip)
|         +--ro ip-address?    inet:ipv4-address
+--ro output
  +--ro arp-entry [ip-address]
    +--ro ip-address           inet:ipv4-address
    +--ro mac-address?        mac-access-list:mac-address-type
    +--ro interface-type?    enumeration
    +--ro interface-name?    union
    +--ro is-resolved?       boolean
    +--ro age?               string
    +--ro entry-type?        enumeration
```

Actions None

brocade-beacon

Description Provides a data model enabling and disabling the interface beacon and chassis beacon.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-beacon
  +--rw beacon
    +--rw enable
    +--rw disable
```

External augmentations None

RPCs None

Actions Proprietary actions defined in this module follow.

Enable the interface beacon:

```
module: brocade-beacon
  +--rw beacon
    +--rw enable
      +--ro interface
        +--ro input
          +--ro (interface-type)?
            +--:(fortygigabitethernet) string
            +--:(hundredgigabitethernet) string
            +--:(gigabitethernet) string
            +--:(tengigabitethernet) string
          +--ro tengigabitethernet string
        +--ro output
```

Disable the interface beacon:

```
module: brocade-beacon
  +--rw beacon
    +--rw disable
      +--ro interface
        +--ro input
          +--ro (interface-type)?
            +--:(fortygigabitethernet) string
            +--:(hundredgigabitethernet) string
            +--:(gigabitethernet) string
            +--:(tengigabitethernet) string
          +--ro tengigabitethernet string
        +--ro output
```

Enable the chassis beacon:

```
module: brocade-beacon
  +--rw beacon
    +--rw enable
      +--ro chassis
```

2 brocade-beacon

```
    |    +--ro input
    |    +--ro output
```

Disable the chassis beacon:

```
module: brocade-beacon
  +--rw beacon
    +--rw disable
      |    +--ro chassis
      |    +--ro input
      |    +--ro output
```


brocade-bgp

Description This management module is an instrumentation to manage BGP Protocol.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw router
      +--rw bgp:bgp [vrf-name]
        +--rw bgp:vrf-name string
        +--rw bgp:router-bgp-cmds-holder
          +--rw bgp:router-bgp-attributes
            +--rw bgp:local-as? local-as-type
            +--rw bgp:always-compare-med? empty
            +--rw bgp:compare-med-empty-aspath? empty
            +--rw bgp:med-missing-as-worst? empty
            +--rw bgp:as-path-ignore? empty
            +--rw bgp:compare-routerid? empty
            +--rw bgp:install-igp-cost? empty
            +--rw bgp:cluster-id
              +--rw (ch-cluster-id)?
                +---:(ca-cluster-id)
                  +--rw bgp:cluster-id-value? decimal-number
                  +---:(ca-cluster-id-ipv4-address)
                    +--rw bgp:cluster-id-ipv4-address? inet:ipv4-address
            +--rw bgp:default-local-preference? local-preference-number
            +--rw bgp:distance
              +--rw bgp:ext-route-distance? ext-route-distance
              +--rw bgp:int-route-distance? int-route-distance
              +--rw bgp:lcl-route-distance? lcl-route-distance
            +--rw bgp:capability
              +--rw bgp:as4-enable? empty
            +--rw bgp:maxas-limit
              +--rw bgp:in
                +--rw bgp:num-as-in-path? num-as-in-path
            +--rw bgp:enforce-first-as? empty
            +--rw bgp:fast-external-fallover? empty
            +--rw bgp:timers
              +--rw bgp:keep-alive? nei-keep-alive
              +--rw bgp:hold-time? nei-hold-time
            +--rw bgp:log-dampening-debug? empty
            +--rw bgp:peer-grps
              +--rw bgp:neighbor-peer-grp [router-bgp-neighbor-peer-grp]
                +--rw bgp:router-bgp-neighbor-peer-grp bgp-peergroup
                +--rw bgp:peer-group-name? empty
                +--rw bgp:remote-as? bgp-remote-as
                +--rw bgp:description? neighbor-description
                +--rw bgp:shutdown
                  +--rw bgp:shutdown-status? empty
                  +--rw bgp:generate-rib-out? empty
                +--rw bgp:local-as
                  +--rw bgp:local-as-value? local-as-num

```

```

|   +--rw bgp:no-prepend?          empty
+--rw bgp:next-hop-self
|   +--rw (ch-next-hop-self-type)?
|       +---:(ca-next-hop-self-always)
|           |   +--rw bgp:next-hop-self-always?    empty
|           +---:(ca-next-hop-self-status)
|               +--rw bgp:next-hop-self-status?    empty
+--rw bgp:advertisement-interval
|   +--rw bgp:value?    adv-value
+--rw bgp:ebgp-multihop
|   +--rw (ch-ebgp-multihop-type)?
|       +---:(ca-ebgp-multihop-flag)
|           |   +--rw bgp:ebgp-multihop-flag?    empty
|           +---:(ca-ebgp-multihop-count)
|               +--rw bgp:ebgp-multihop-count?    uint32
+--rw bgp:maxas-limit
|   +--rw bgp:in
|       +--rw (ch-maxas-limit)?
|           +---:(ca-maxas-limit-enable)
|               |   +--rw bgp:num-as-in-as-path?    num-as-in-as-path
|               +---:(ca-maxas-limit-disable)
|                   +--rw bgp:maxas-limit-disable?    empty
+--rw bgp:password?                bgp-password
+--rw bgp:enforce-first-as
|   +--rw bgp:nei-enforce-first-as?    empty
|   +--rw bgp:nei-enforce-first-as-disable?    empty
+--rw bgp:neighbor-capability
|   +--rw bgp:as4
|       +--rw bgp:neighbor-as4-enable?    empty
|       +--rw bgp:neighbor-as4-disable?    empty
+--rw bgp:timers
|   +--rw bgp:nei-keep-alive?    nei-keep-alive
|   +--rw bgp:nei-hold-time?    nei-hold-time
+--rw bgp:update-source
|   +--rw (ch-update-source)?
|       +---:(ca-ipv4)
|           |   +--rw bgp:sip-ipv4-address?    sip-ipv4-address
|           +---:(ca-eth)
|               |   +--rw bgp:ethernet-interface
|               |       +--rw bgp:interface-type?    enumeration
|               |       +--rw bgp:ethernet?    update-source-ethernet-type
|           +---:(ca-loopback)
|               |   +--rw bgp:loopback?    loopback-interface
|           +---:(ca-ve)
|               |   +--rw bgp:ve-interface?    interface:ve-type
+--rw bgp:remove-private-as?    empty
+--rw bgp:as-override?    empty
+--rw bgp:soft-reconfiguration
|   +--rw bgp:inbound?    empty
+--rw bgp:neighbor-ips
|   +--rw bgp:neighbor-addr [router-bgp-neighbor-address]
|       +--rw bgp:router-bgp-neighbor-address    inet:ip-address
|       +--rw bgp:remote-as?    bgp-remote-as
|       +--rw bgp:associate-peer-group?    bgp-peergroup
|       +--rw bgp:description?    neighbor-description
+--rw bgp:shutdown
|   +--rw bgp:shutdown-status?    empty
|   +--rw bgp:generate-rib-out?    empty
+--rw bgp:local-as
|   +--rw bgp:local-as-value?    local-as-num

```

```

|   +--rw bgp:no-prepend?          empty
+--rw bgp:next-hop-self
|   +--rw (ch-next-hop-self-type)?
|       +---:(ca-next-hop-self-always)
|           |   +--rw bgp:next-hop-self-always?    empty
|           +---:(ca-next-hop-self-status)
|               +--rw bgp:next-hop-self-status?    empty
+--rw bgp:advertisement-interval
|   +--rw bgp:value?    adv-value
+--rw bgp:ebgp-multihop
|   +--rw (ch-ebgp-multihop-type)?
|       +---:(ca-ebgp-multihop-flag)
|           |   +--rw bgp:ebgp-multihop-flag?    empty
|           +---:(ca-ebgp-multihop-count)
|               +--rw bgp:ebgp-multihop-count?    uint32
+--rw bgp:maxas-limit
|   +--rw bgp:in
|       +--rw (ch-maxas-limit)?
|           +---:(ca-maxas-limit-enable)
|               |   +--rw bgp:num-as-in-as-path?    num-as-in-as-path
|               +---:(ca-maxas-limit-disable)
|                   +--rw bgp:maxas-limit-disable?    empty
+--rw bgp:password?                bgp-password
+--rw bgp:enforce-first-as
|   +--rw bgp:nei-enforce-first-as?    empty
|   +--rw bgp:nei-enforce-first-as-disable?    empty
+--rw bgp:neighbor-capability
|   +--rw bgp:as4
|       +--rw bgp:neighbor-as4-enable?    empty
|       +--rw bgp:neighbor-as4-disable?    empty
+--rw bgp:timers
|   +--rw bgp:nei-keep-alive?    nei-keep-alive
|   +--rw bgp:nei-hold-time?    nei-hold-time
+--rw bgp:update-source
|   +--rw (ch-update-source)?
|       +---:(ca-ipv4)
|           |   +--rw bgp:sip-ipv4-address?    sip-ipv4-address
|       +---:(ca-eth)
|           |   +--rw bgp:ethernet-interface
|           |       +--rw bgp:interface-type?    enumeration
|           |       +--rw bgp:ethernet?        update-source-ethernet-type
|       +---:(ca-loopback)
|           |   +--rw bgp:loopback?            loopback-interface
|       +---:(ca-ve)
|           |   +--rw bgp:ve-interface?        interface:ve-type
+--rw bgp:remove-private-as?        empty
+--rw bgp:as-override?                empty
+--rw bgp:soft-reconfiguration
|   +--rw bgp:inbound?    empty
+--rw bgp:address-family
|   +--rw bgp:ipv4
|       +--rw bgp:ipv4-unicast?
|           +--rw bgp:af-ipv4-uc-and-vrf-cmds-call-point-holder
|               +--rw bgp:bgp- redistribute-internal?    empty
|               +--rw bgp:redistribute
|                   +--rw bgp:connected
|                       |   +--rw bgp:redistribute-connected?    empty
|                       |   +--rw bgp:unicast-metric?            conn-metric
|                       |   +--rw bgp:redistribute-route-map?    rmap-type
+--rw bgp:ospf

```

							+++rw bgp:redistribute-ospf?	empty
							+++rw bgp:match	
							+++rw bgp:ospf-internal?	empty
							+++rw bgp:ospf-external1?	empty
							+++rw bgp:ospf-external2?	empty
							+++rw bgp:ospf-metric?	conn-metric
							+++rw bgp:ospf-route-map?	rmap-type
							+++rw bgp:static	
							+++rw bgp:redistribute-static?	empty
							+++rw bgp:unicast-static-metric?	conn-metric
							+++rw bgp:static-route-map?	rmap-type
							+++rw bgp:static-network [static-network-address]	
							+++rw bgp:static-network-address	inet:ipv4-prefix
							+++rw bgp:static-network-distance?	sdistance
							+++rw bgp:aggregate-address [aggregate-ip-prefix]	
							+++rw bgp:aggregate-ip-prefix	inet:ipv4-prefix
							+++rw bgp:advertise-map?	advertise-map
							+++rw bgp:as-set?	empty
							+++rw bgp:attribute-map?	attribute-map
							+++rw bgp:summary-only?	empty
							+++rw bgp:suppress-map?	suppress-map
							+++rw bgp:network [network-ipv4-address]	
							+++rw bgp:network-ipv4-address	inet:ipv4-prefix
							+++rw bgp:network-weight?	absolute-decimal-number
							+++rw bgp:backdoor?	empty
							+++rw bgp:network-route-map?	rmap-type
							+++rw bgp:af-ipv4-neighbor-peergroup-holder	
							+++rw bgp:af-ipv4-neighbor-peergroup [af-ipv4-neighbor-peergroup-name]	
							+++rw bgp:af-ipv4-neighbor-peergroup-name	bgp-peergroup
							+++rw bgp:activate?	empty
							+++rw bgp:filter-list	
							+++rw bgp:direction-in	
							+++rw bgp:filter-list-direction-in-acl-name?	ip-filter-name
							+++rw bgp:filter-list-name-direction-in?	empty
							+++rw bgp:direction-out	
							+++rw bgp:filter-list-direction-out-acl-name?	ip-filter-name
							+++rw bgp:filter-list-name-direction-out?	empty
							+++rw bgp:maximum-prefix	
							+++rw bgp:max-prefix-limit?	max-prefix-limit
							+++rw bgp:threshold-holder	
							+++rw bgp:threshold?	max-prefix-threshold
							+++rw bgp:teardown?	empty
							+++rw bgp:default-originate	
							+++rw bgp:default-originate-status?	empty
							+++rw bgp:default-originate-route-map?	rmap-type
							+++rw bgp:prefix-list	
							+++rw bgp:direction-in	
nei-prefix-list-filter							+++rw bgp:prefix-list-direction-in-prefix-name?	
							+++rw bgp:prefix-list-direction-in?	empty
							+++rw bgp:direction-out	
							+++rw bgp:prefix-list-direction-out-prefix-name?	
nei-prefix-list-filter							+++rw bgp:prefix-list-direction-out?	empty
							+++rw bgp:neighbor-route-map	
							+++rw bgp:neighbor-route-map-direction-in	
							+++rw bgp:neighbor-route-map-name-direction-in?	
common-def:name-string64							+++rw bgp:neighbor-route-map-direction-out	

```

    | |
common-def:name-string64 |          +---rw bgp:neighbor-route-map-name-direction-out?
    | |
    | |          +---rw bgp:route-reflector-client?          empty
    | |          +---rw bgp:send-community
    | |          |   +---rw bgp:send-community-status?    empty
    | |          |   +---rw bgp:both?                   empty
    | |          |   +---rw bgp:extended?               empty
    | |          |   +---rw bgp:standard?               empty
    | |          +---rw bgp:unsuppress-map
    | |          |   +---rw bgp:map-name?    rmap-type
    | |          +---rw bgp:af-nei-weight?              nei-weight
+---rw bgp:af-ipv4-neighbor-address-holder
  +---rw bgp:af-ipv4-neighbor-address [af-ipv4-neighbor-address]
  +---rw bgp:af-ipv4-neighbor-address    inet:ip-address
  +---rw bgp:activate?                   empty
  +---rw bgp:filter-list
  |   +---rw bgp:direction-in
  |   |   +---rw bgp:filter-list-direction-in-acl-name?    ip-filter-name
  |   |   +---rw bgp:filter-list-name-direction-in?      empty
  |   +---rw bgp:direction-out
  |   |   +---rw bgp:filter-list-direction-out-acl-name?    ip-filter-name
  |   |   +---rw bgp:filter-list-name-direction-out?      empty
+---rw bgp:maximum-prefix
  +---rw bgp:maximum-prefix-limit?    max-prefix-limit
  +---rw bgp:threshold-holder
  |   +---rw bgp:threshold?    max-prefix-threshold
  |   +---rw bgp:teardown?    empty
+---rw bgp:default-originate
  +---rw bgp:default-originate-status?    empty
  +---rw bgp:default-originate-route-map?    rmap-type
+---rw bgp:prefix-list
  +---rw bgp:direction-in
  |   +---rw bgp:prefix-list-direction-in-prefix-name?
nei-prefix-list-filter
  |   |   +---rw bgp:prefix-list-direction-in?          empty
  |   +---rw bgp:direction-out
  |   |   +---rw bgp:prefix-list-direction-out-prefix-name?
nei-prefix-list-filter
  |   |   +---rw bgp:prefix-list-direction-out?          empty
+---rw bgp:neighbor-route-map
  +---rw bgp:neighbor-route-map-direction-in
  |   +---rw bgp:neighbor-route-map-name-direction-in?
common-def:name-string64
  |   +---rw bgp:neighbor-route-map-direction-out
  |   +---rw bgp:neighbor-route-map-name-direction-out?
common-def:name-string64
  +---rw bgp:route-reflector-client?    empty
  +---rw bgp:send-community
  |   +---rw bgp:send-community-status?    empty
  |   +---rw bgp:both?                   empty
  |   +---rw bgp:extended?               empty
  |   +---rw bgp:standard?               empty
  +---rw bgp:unsuppress-map
  |   +---rw bgp:map-name?    rmap-type
  +---rw bgp:af-nei-weight?              nei-weight
+---rw bgp:af-common-cmds-holder
  +---rw bgp:maximum-paths
  |   +---rw bgp:load-sharing-value?    uint32
  |   +---rw bgp:ebgp?                 ebgp-paths
  +---rw bgp:ibgp?                     ibgp-paths

```

2 brocade-bgp

```

| | | | +--rw bgp:use-load-sharing?      empty
| | | | +--rw bgp:multipath
| | | | | +--rw bgp:multipath_ebgp?    empty
| | | | | +--rw bgp:multipath_ibgp?    empty
| | | | | +--rw bgp:multi-as?          empty
| | | | +--rw bgp:always-propagate?    empty
| | | | +--rw bgp:default-information-originate?  empty
| | | | +--rw bgp:rib-route-limit?     decimal-number
| | | | +--rw bgp:client-to-client-reflection?  empty
| | | | +--rw bgp:dampening
| | | | | +--rw (ch-dampening-source)?
| | | | | | +--:(ca-dampening-flag)
| | | | | | | +--rw bgp:dampening-flag?    empty
| | | | | | +--:(ca-dampening-specify-values)
| | | | | | | +--rw bgp:values
| | | | | | | | +--rw bgp:half-time?      htime
| | | | | | | | +--rw bgp:reuse-value?    damp-reuse-value
| | | | | | | | +--rw bgp:start-suppress-time?  damp-start-suppress-value
| | | | | | | | +--rw bgp:max-suppress-time?  damp-max-suppress-value
| | | | | | +--:(ca-dampening-route-map)
| | | | | | | +--rw bgp:dampening-route-map?  rmap-type
| | | | +--rw bgp:default-metric?      default-metric-number
| | | | +--rw bgp:next-hop-enable-default?  empty
| | | | +--rw bgp:table-map
| | | | | +--rw bgp:table-map-route-map?  rmap-type
| | | | +--rw bgp:update-time?         update-time-type
| | | | +--rw bgp:next-hop-recursion?   empty

```

RPCs None

Actions None

brocade-bprate-limit

Description Provides a data model for configuring the BP rate limit.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-bprate-limit
  +--rw bp-rate-limit
    +--rw heavy
      +--rw bp-rate-limit-slot [bp-rate-limit-slot-num]
        +--rw bp-rate-limit-slot-num slotnumber
```

External augmentations None

RPCs None

Actions None

brocade-bum-storm-control

Description Provides a data model for controlling traffic storms. A traffic storm occurs when packets flood the LAN, creating excessive traffic and degrading network performance. The BUM storm control feature is meant to prevent disruptions on Layer 2 physical ports caused by excessive ingress broadcast, multicast, and unknown unicast traffic. BUM Storm control allows you to limit the amount of BUM traffic admitted to the system

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   |   +--rw bum-storm-control:storm-control
  |   |   |   +--rw bum-storm-control:ingress [protocol-type]
  |   |   |   |   +--rw bum-storm-control:protocol-type enumeration
  |   |   |   |   +--rw bum-storm-control:rate-format? enumeration
  |   |   |   |   +--rw bum-storm-control:rate-bps? bps-rate-limit
  |   |   |   |   +--rw bum-storm-control:rate-percent? percentage-rate-limit
  |   |   |   |   +--rw bum-storm-control:bum-action? enumeration
  |   |   +--rw tengigabitethernet [name]
  |   |   |   +--rw bum-storm-control:storm-control
  |   |   |   |   +--rw bum-storm-control:ingress [protocol-type]
  |   |   |   |   |   +--rw bum-storm-control:protocol-type enumeration
  |   |   |   |   |   +--rw bum-storm-control:rate-format? enumeration
  |   |   |   |   |   +--rw bum-storm-control:rate-bps? bps-rate-limit
  |   |   |   |   |   +--rw bum-storm-control:rate-percent? percentage-rate-limit
  |   |   |   |   |   +--rw bum-storm-control:bum-action? enumeration
  |   |   +--rw fortygigabitethernet [name]
  |   |   |   +--rw bum-storm-control:storm-control
  |   |   |   |   +--rw bum-storm-control:ingress [protocol-type]
  |   |   |   |   |   +--rw bum-storm-control:protocol-type enumeration
  |   |   |   |   |   +--rw bum-storm-control:rate-format? enumeration
  |   |   |   |   |   +--rw bum-storm-control:rate-bps? bps-rate-limit
  |   |   |   |   |   +--rw bum-storm-control:rate-percent? percentage-rate-limit
  |   |   |   |   |   +--rw bum-storm-control:bum-action? enumeration
  |   |   +--rw hundredgigabitethernet [name]
  |   |   |   +--rw bum-storm-control:storm-control
  |   |   |   |   +--rw bum-storm-control:ingress [protocol-type]
  |   |   |   |   |   +--rw bum-storm-control:protocol-type enumeration
  |   |   |   |   |   +--rw bum-storm-control:rate-format? enumeration
  |   |   |   |   |   +--rw bum-storm-control:rate-bps? bps-rate-limit
  |   |   |   |   |   +--rw bum-storm-control:rate-percent? percentage-rate-limit
  |   |   |   |   |   +--rw bum-storm-control:bum-action? enumeration

```

RPCs None

Actions None

brocade-cdp

Description	Provides a data model for enabling or disabling the Cisco Discovery Protocol (CDP).
Top-level containers	None
External augmentations	Nodes that augment other modules and their subtrees follow. <pre>module: brocade-interface +--rw protocol +--rw cdp:cdp?</pre>
RPCs	None
Actions	None

brocade-cee-map

Description Provides a data model for managing the Converged Enhanced Ethernet (CEE) map.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-cee-map
  +--rw cee-map [name]
    +--rw name                               common-def:name-string32
    +--rw precedence?                        int32
    +--rw priority-group-table [PGID]
      | +--rw PGID      qos-type-PGID
      | +--rw weight?   int32
      | +--rw pfc       enumeration
    +--rw priority-table
      | +--rw map-cos0-pgid?  string
      | +--rw map-cos1-pgid?  string
      | +--rw map-cos2-pgid?  string
      | +--rw map-cos3-pgid?  string
      | +--rw map-cos4-pgid?  string
      | +--rw map-cos5-pgid?  string
      | +--rw map-cos6-pgid?  string
      | +--rw map-cos7-pgid?  string
    +--rw remap
      +--rw fabric-priority
        | +--rw fabric-remapped-priority?  int32
      +--rw lossless-priority
        +--rw lossless-remapped-priority?  int32
  
```

External augmentations None

RPCs None

Actions None

brocade-certutil

Description Provides a data model for certificate management operations. It provides tail-f actions to perform the following functions:

- Import an LDAP CA certificate
- Remove an LDAP CA certificate
- Show the LDAP certificate

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-certutil
  +---rw certutil
    +---rw import
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +---rw no
  |   +---rw certutil:certutil
  +---rw show
  |   +---rw certutil:cert-util
```

RPCs None

Actions Proprietary actions defined in this module follow.

Import an LDAP CA certificate:

```
module: brocade-certutil
  +---rw certutil
    +---rw import
      +---ro ldapca
        |   +---ro input
        |   |   +---ro protocol      enumeration
        |   |   +---ro user         string
        |   |   +---ro password?    string
        |   |   +---ro host         string
        |   |   +---ro directory    string
        |   |   +---ro file         string
        |   |   +---ro rbridge-id?  common-def:rbridge-id-all-type
        |   +---ro output
```

Import a syslog server CA certificate:

```
module: brocade-certutil
  +---rw certutil
    +---rw import
      +---ro syslogca
        |   +---ro input
        |   |   +---ro protocol      enumeration
        |   |   +---ro user         string
        |   |   +---ro password?    string
        |   |   +---ro host         string
        |   |   +---ro directory    string
        |   |   +---ro file         string
        |   |   +---ro rbridge-id?  common-def:rbridge-id-all-type
        |   +---ro output
```

Import an SSH public key:

```

module: brocade-certutil
  +--rw certutil
    +--rw import
      +--ro sshkey
        +--ro input
          | +--ro user          string
          | +--ro host          string
          | +--ro directory     string
          | +--ro file          string
          | +--ro login         string
          | +--ro password?     string
          | +--ro rbridge-id?   common-def:rbridge-id-all-type
        +--ro output
  
```

Remove an LDAP CA certificate:

```

module: brocade-common-def
  +--rw no
    | +--rw certutil:certutil
    | | +--ro certutil:ldapca
    | | | +--ro certutil:input
    | | | | +--ro certutil:rbridge-id? common-def:rbridge-id-all-type
    | | | +--ro certutil:output
  
```

Remove a syslog server CA certificate:

```

module: brocade-common-def
  +--rw no
    | +--rw certutil:certutil
    | | +--ro certutil:syslogca
    | | | +--ro certutil:input
    | | | | +--ro certutil:rbridge-id? common-def:rbridge-id-all-type
    | | | +--ro certutil:output
  
```

Remove an SSH public key:

```

module: brocade-common-def
  +--rw no
    | +--rw certutil:certutil
    | | +--ro certutil:sshkey
    | | | +--ro certutil:input
    | | | | +--ro certutil:user          string
    | | | | +--ro certutil:rbridge-id? common-def:rbridge-id-all-type
    | | | +--ro certutil:output
  
```

Show the LDAP CA certificate:

```

module: brocade-common-def
  +--rw show
    | +--rw certutil:cert-util
    | | +--ro certutil:ldapcacert
    | | | +--ro certutil:input
    | | | | +--ro certutil:rbridge-id? common-def:rbridge-id-all-type
    | | | +--ro certutil:output
  
```

Show the syslog server CA certificate:

```

module: brocade-common-def
  +--rw show
    | +--rw certutil:cert-util
    | | +--ro certutil:syslogcacert
    | | | +--ro certutil:input
  
```

```

| | | | +--ro certutil:rbridge-id? common-def:rbridge-id-all-type
| | | +--ro certutil:output

```

Show the SSH public key:

```

module: brocade-common-def
+--rw show
| +--rw certutil:cert-util
| | +--ro certutil:sshkey
| | +--ro certutil:input
| | | +--ro certutil:user string
| | | +--ro certutil:rbridge-id? common-def:rbridge-id-all-type
| | +--ro certutil:output

```

brocade-chassis

Description Provides a data model for enabling and disabling the chassis.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-chassis
  +--rw hide-virtual-ip-holder
  |   +--rw chassis
  |       +--rw virtual-ip?      common-def:ipv4-prefix-mask
  |       +--rw virtual-ipv6?   common-def:ipv6-address-prefix
  |       +--rw oper-address
  |           +--ro virtual-oper-Vip-address?
  common-def:ipv4-address-prefix-type
  |       +--ro virtual-oper-VipV6-address*   string
  +--rw chassis
  |   +--rw beacon
  |   +--rw fan
  |   +--rw airflow-direction

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  |   +--rw chassis:chassis
  |       +--rw chassis:virtual-ip?      common-def:ipv4-prefix-mask
  |       +--rw chassis:virtual-ipv6?   common-def:ipv6-address-prefix
  |       +--rw chassis:oper-address
  |           +--ro chassis:virtual-oper-Vip-address?
  common-def:ipv4-address-prefix-type
  |       +--ro chassis:virtual-oper-VipV6-address*   string

```

RPCs None

Actions Proprietary actions defined in this module follow.

Enable the chassis:

```

module: brocade-chassis
  +--rw chassis
  |   +--ro enable

```

Disable the chassis:

```

module: brocade-chassis
  +--rw chassis
  |   +--ro disable

```

Enable the chassis beacon:

```

module: brocade-chassis
  +--rw chassis
  |   +--rw beacon
  |       | +--ro enable

```

Disable the chassis beacon:

```

module: brocade-chassis
  +--rw chassis
  |   +--rw beacon
  |       | +--ro disable

```

Set the airflow direction to port-side-intake:

```
module: brocade-chassis
  +--rw chassis
    +--rw fan
      +--rw airflow-direction
        +--ro port-side-intake
```

Set the airflow direction to port-side-exhaust:

```
module: brocade-chassis
  +--rw chassis
    +--rw fan
      +--rw airflow-direction
        +--ro port-side-exhaust
```

brocade-clock

Description Provides a data model for managing the local clock. It provides mechanisms for setting the local clock time and time zone and for retrieving local clock information.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-clock
  +--rw clock-set-datetime
  +--rw clock-set-timezone
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  | +--rw clock-server:clock
```

RPCs Custom RPCs defined in this module follow.

Retrieve local clock information:

```
+---x show-clock
  +--ro input
  | +--ro rbridge-id?   common-def:rbridge-id-all-type
  +--ro output
    +--ro clock-time
      +--ro rbridge-id-out?   common-def:rbridge-id-type
      +--ro current-time?    ietfyang:date-and-time
      +--ro timezone?        string
```

Actions Proprietary actions defined in this module follow.

Set the date and time:

```
module: brocade-clock
  +--rw clock-set-datetime
  | +--ro clock
  | | +--ro input
  | | | +--ro set   ietfyang:date-and-time
  | | | +--ro rbridge-id?   common-def:rbridge-id-all-type
  | | +--ro output
```

Set the time zone:

```
module: brocade-clock
  +--rw clock-set-timezone
  +--ro clock
    +--ro input
      | +--ro timezone   common-def:timezone
      | +--ro rbridge-id?   common-def:rbridge-id-all-type
    +--ro output
```

Set the time zone:

```
module: brocade-common-def
  +--rw no
  | +--rw clock-server:clock
  | | +--ro clock-server:timezone
  | | | +--ro clock-server:input
  | | | | +--ro clock-server:rbridge-id?   common-def:rbridge-id-all-type
  | | | +--ro clock-server:output
```


brocade-common-def

Description Provides a data model for commonly used data types derived in the Brocade namespace.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw defaults
  +--rw clear
  +--rw no
  +--rw ip
  +--rw ipv6
  +--rw router
```

External augmentations None

RPCs None

Actions None

brocade-dhcp

Description Provides a data model to manage DHCP functionality.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw brocade-interface:interface
      | | +--rw ip-config:ip
      | | | +--rw dhcp:interface-ve-dhcp-conf
      | | | | +--rw dhcp:dhcp
      | | | | +--rw dhcp:relay
      | | | | | +--rw dhcp:servers [relay-ip-addr server-vrf-name]
      | | | | | +--rw dhcp:relay-ip-addr      dhcp-ipv4-address
      | | | | | +--rw dhcp:server-vrf-name    common-def:vrf-name

module: brocade-interface
  +--rw interface
    | +--rw hundredgigabitethernet [name]
    | | +--rw ip
    | | | +--rw dhcp:interface-hu-dhcp-conf
    | | | | +--rw dhcp:dhcp
    | | | | +--rw dhcp:relay
    | | | | | +--rw dhcp:servers [relay-ip-addr server-vrf-name]
    | | | | | +--rw dhcp:relay-ip-addr      dhcp-ipv4-address
    | | | | | +--rw dhcp:server-vrf-name    common-def:vrf-name

module: brocade-interface
  +--rw interface
    | +--rw fortygigabitethernet [name]
    | | +--rw ip
    | | | +--rw dhcp:interface-fo-dhcp-conf
    | | | | +--rw dhcp:dhcp
    | | | | +--rw dhcp:relay
    | | | | | +--rw dhcp:servers [relay-ip-addr server-vrf-name]
    | | | | | +--rw dhcp:relay-ip-addr      dhcp-ipv4-address
    | | | | | +--rw dhcp:server-vrf-name    common-def:vrf-name

module: brocade-interface
  +--rw interface
    | +--rw tengigabitethernet [name]
    | | +--rw ip
    | | | +--rw dhcp:interface-te-dhcp-conf
    | | | | +--rw dhcp:dhcp
    | | | | +--rw dhcp:relay
    | | | | | +--rw dhcp:servers [relay-ip-addr server-vrf-name]
    | | | | | +--rw dhcp:relay-ip-addr      dhcp-ipv4-address
    | | | | | +--rw dhcp:server-vrf-name    common-def:vrf-name

module: brocade-interface
  +--rw interface
    | +--rw gigabitethernet [name]
    | | +--rw ip
    | | | +--rw dhcp:interface-gi-dhcp-conf
    | | | | +--rw dhcp:dhcp

```

```

| | | |
| | | |
| | | |
| | | |

```

```

+--rw dhcp:relay
  +--rw dhcp:servers [relay-ip-addr server-vrf-name]
    +--rw dhcp:relay-ip-addr      dhcp-ipv4-address
    +--rw dhcp:server-vrf-name    common-def:vrf-name

```

RPCs None

Actions None

brocade-diagnostics

Description Provides a data model for managing diagnostic tests. It provides the ability to enable or disable power-on self tests (POSTs) and actions to initiate the tests listed in [Table 1](#).

TABLE 1 Diagnostic actions

Action	Purpose
burninerrclear	Clears the errors that are stored in the nonvolatile storage on the slot during the burn-in process.
clearerror	Clears the diagnostics failure status.
portledtest	Runs various action modes on the port LEDs and validates the functionality.
portloopbacktest	Sends frames between various ASICs on the switch and validates the ASIC functionality.
post	Performs power on self test? REVIEWERS PLEASE CONFIRM!!!!
prbstest	Performs pseudo-random binary-sequence tests.
setcycle	Configures all the parameters required for the system verification test.
setdbg	Changes the debug level.
systemverification	Runs a combination of various hardware diagnostic tests.
turboramtest	Performs a turbo static RAM (SRAM) test of the ASIC chips.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-diagnostics
  +--rw diag
  |   +--rw post
  +--rw fos
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw diagnostics:diag
  |   |   +--rw diagnostics:post
```

RPCs None

Actions Proprietary actions defined in this module follow.

Run the turbo RAM test:

```
module: brocade-diagnostics
  +--rw diag
  |   +--ro turboramtest
  |   |   +--ro input
  |   |   |   +--ro slot          slotidtype
  |   |   |   +--ro passcnt?    uint32
  |   |   +--ro output
  |   |   +--ro result?        string
```

Run the port loopback test:

```
module: brocade-diagnostics
  +--rw diag
  |   +--ro portloopbacktest
```

```

| | +--ro input
| | | +--ro (interfaces)?
| | | | +--:(slot)
| | | | | +--ro slot          slotidtype
| | | | | +--:(ethernet)
| | | | | +--ro ethernet?    interfaces:interface-type
| | | | | +--:(fibrenchannel)
| | | | | +--ro fibrenchannel? interfaces:interface-type
| | | +--ro nframes?        uint32
| | | +--ro lbmode?         uint32
| | | +--ro spdmode?        enumeration
| | +--ro output
| | +--ro result?          string

```

Run the port LED test:

```

module: brocade-diagnostics
+--rw diag
| +--ro portledtest
| | +--ro input
| | | +--ro (interfaces)?
| | | | +--:(slot)
| | | | | +--ro slot          slotidtype
| | | | | +--:(ethernet)
| | | | | +--ro ethernet?    interfaces:interface-type
| | | | | +--:(fibrenchannel)
| | | | | +--ro fibrenchannel? interfaces:interface-type
| | | +--ro action?         enumeration
| | | +--ro npass?          uint32
| | +--ro output
| | +--ro result?          string

```

Run the system verification test:

```

module: brocade-diagnostics
+--rw diag
| +--ro systemverification
| | +--ro input
| | | +--ro (sysv)?
| | | | +--:(short)
| | | | | +--ro short?      empty
| | | | | +--:(stop)
| | | | | +--ro stop?      empty
| | +--ro output
| | +--ro result?          string

```

Run the pseudorandom binary sequence test:

```

module: brocade-diagnostics
+--rw diag
| +--ro prbstest
| | +--ro input
| | | +--ro slot          slotidtype
| | | +--ro pattern?     enumeration
| | +--ro output
| | +--ro result?          string

```

Clear the diagnostic failure status:

```

module: brocade-diagnostics
+--rw diag
| +--ro clearerror
| | +--ro output

```

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```
| | | +--ro result? string
```

Clear the errors that are stored in the nonvolatile storage during the burn-in process:

```
module: brocade-diagnostics
  +--rw diag
  |   +--ro burninerrclear
  |   |   +--ro output
  |   |   |   +--ro result? string
```

Configure all the parameters required for the system verification test:

```
module: brocade-diagnostics
  +--rw diag
  |   +--ro setcycle
  |   |   +--ro input
  |   |   |   +--ro tbr_passes? uint32
  |   |   |   +--ro num_of_runs? uint32
  |   |   |   +--ro min_lb_mode? uint32
  |   |   |   +--ro plb_nframes? uint32
  |   |   +--ro output
  |   |   |   +--ro result? string
```

Set debug:

```
module: brocade-diagnostics
  +--rw diag
  |   +--ro setdbg
  |   |   +--ro input
  |   |   |   +--ro level? enumeration
```

Run post verification test:

```
module: brocade-diagnostics
  +--rw diag
  |   +--rw post
  |   |   +--rw rbridge-id [rbridge-id]
  |   |   |   +--rw enable? empty
  |   |   |   +--rw rbridge-id common-def:rbridge-id-type
  |   |   +--rw enable? empty
```

Run native FOS commands:

```
module: brocade-diagnostics
  +--rw fos
  |   +--ro exec
  |   |   +--ro input
  |   |   |   +--ro (op)?
  |   |   |   |   +--:(file)
  |   |   |   |   |   +--ro file? string
  |   |   |   |   +--:(cmd)
  |   |   |   |   |   +--ro cmd? string
  |   |   +--ro output
```

Displays results of Diagpost:

```
module: brocade-common-def
  +--rw show
  |   +--rw diagnostics:diag
  |   |   +--rw diagnostics:post
  |   |   |   +--ro diagnostics:results
  |   |   |   +--ro diagnostics:input
  |   |   |   |   +--ro (localremote)?
  |   |   |   |   |   +--:(local)
```

```

| | | | | +--ro diagnostics:slot          slotidtype
| | | | | +---:(remote)
| | | | |   +--ro diagnostics:rbridge-id?  common-def:rbridge-id-type
| | | | |   +--ro (postresult)?
| | | | |     +---:(brief)
| | | | |     | +--ro diagnostics:brief?    empty
| | | | |     +---:(detailed)
| | | | |       +--ro diagnostics:detailed?  empty
| | | | | +--ro diagnostics:output
| | | | | +--ro diagnostics:result?  string

```

Displays currently running diagnostic tests:

```

module: brocade-common-def
+--rw show
| | +--ro diagnostics:status
| | | +--ro diagnostics:input
| | | | +--ro (localremote)?
| | | |   +---:(local)
| | | |   | +--ro diagnostics:slot          slotidtype
| | | |   +---:(remote)
| | | |   +--ro diagnostics:rbridge-id?  common-def:rbridge-id-type
| | | +--ro diagnostics:output
| | | +--ro diagnostics:result?  string

```

Check the status of last run system verification test:

```

module: brocade-common-def
+--rw show
| | +--ro diagnostics:burninstatus
| | | +--ro diagnostics:input
| | | | +--ro diagnostics:rbridge-id?  common-def:rbridge-id-type
| | | +--ro diagnostics:output
| | | +--ro diagnostics:result?  string

```

Check error log:

```

module: brocade-common-def
+--rw show
| | +--ro diagnostics:burninerrshow
| | | +--ro diagnostics:input
| | | | +--ro diagnostics:rbridge-id?  common-def:rbridge-id-type
| | | +--ro diagnostics:output
| | | +--ro diagnostics:result?  string

```

brocade-dot1x

Description Provides a data model for managing the 802.1x authorization feature.

IEEE 802.1X is an IEEE standard for port-based Network Access Control (PNAC). It is a networking protocol that provides an authentication mechanism to devices attempting to attach to a LAN or WLAN. IEEE 802.1X defines the encapsulation of the Extensible Authentication Protocol (EAP) over IEEE 802, which is known as EAP over LAN or EAPoL.

802.1x involves three parties:

- Supplicant—A device that connects to a network
- Authenticator—A network device such as an Ethernet switch
- Authentication server—A host running software that supports RADIUS and EAP

This module defines the parameters used for the PNAC.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-dot1x
  +--rw dot1x
    +--rw enable?    empty
    +--rw test
      +--rw timeout?  dot1x-readiness-test-timeout-interval
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-interface
  +--rw interface
    | +--rw gigabitEthernet
    | | +--rw dot1x:dot1x
    | | | +--rw dot1x:authentication?    empty
    | | | +--rw dot1x:port-control?      enumeration
    | | | +--rw dot1x:protocol-version?  uint32
    | | | +--rw dot1x:quiet-period?     uint32
    | | | +--rw dot1x:reauthMax?        uint32
    | | | +--rw dot1x:reauthentication?  empty
    | | | +--rw dot1x:timeout
    | | | | +--rw dot1x:re-authperiod?   dot1x-reauth-timeout-interval
    | | | | +--rw dot1x:server-timeout?  dot1x-server-timeout-interval
    | | | | +--rw dot1x:supp-timeout?    dot1x-supp-timeout-interval
    | | | | +--rw dot1x:tx-period?      dot1x-tx-timeout-interval
```

```
module: brocade-interface
  +--rw interface
    | +--rw tengigabitEthernet
    | | +--rw dot1x:dot1x
    | | | +--rw dot1x:authentication?    empty
    | | | +--rw dot1x:port-control?      enumeration
    | | | +--rw dot1x:protocol-version?  uint32
    | | | +--rw dot1x:quiet-period?     uint32
    | | | +--rw dot1x:reauthMax?        uint32
    | | | +--rw dot1x:reauthentication?  empty
    | | | +--rw dot1x:timeout
    | | | | +--rw dot1x:re-authperiod?   dot1x-reauth-timeout-interval
    | | | | +--rw dot1x:server-timeout?  dot1x-server-timeout-interval
    | | | | +--rw dot1x:supp-timeout?    dot1x-supp-timeout-interval
    | | | | +--rw dot1x:tx-period?      dot1x-tx-timeout-interval
```



```

module: brocade-interface
  +--rw interface
  |   +--rw fortygigabitethernet
  |   |   +--rw dot1x:dot1x
  |   |   |   +--rw dot1x:authentication?      empty
  |   |   |   +--rw dot1x:port-control?      enumeration
  |   |   |   +--rw dot1x:protocol-version?   uint32
  |   |   |   +--rw dot1x:quiet-period?      uint32
  |   |   |   +--rw dot1x:reauthMax?         uint32
  |   |   |   +--rw dot1x:reauthentication?   empty
  |   |   |   +--rw dot1x:timeout
  |   |   |   |   +--rw dot1x:re-authperiod?   dot1x-reauth-timeout-interval
  |   |   |   |   +--rw dot1x:server-timeout? dot1x-server-timeout-interval
  |   |   |   |   +--rw dot1x:supp-timeout?   dot1x-supp-timeout-interval
  |   |   |   |   +--rw dot1x:tx-period?     dot1x-tx-timeout-interval

```

```

module: brocade-interface
  +--rw interface
  |   +--rw hundredgigabitethernet
  |   |   +--rw dot1x:dot1x
  |   |   |   +--rw dot1x:authentication?      empty
  |   |   |   +--rw dot1x:port-control?      enumeration
  |   |   |   +--rw dot1x:protocol-version?   uint32
  |   |   |   +--rw dot1x:quiet-period?      uint32
  |   |   |   +--rw dot1x:reauthMax?         uint32
  |   |   |   +--rw dot1x:reauthentication?   empty
  |   |   |   +--rw dot1x:timeout
  |   |   |   |   +--rw dot1x:re-authperiod?   dot1x-reauth-timeout-interval
  |   |   |   |   +--rw dot1x:server-timeout? dot1x-server-timeout-interval
  |   |   |   |   +--rw dot1x:supp-timeout?   dot1x-supp-timeout-interval
  |   |   |   |   +--rw dot1x:tx-period?     dot1x-tx-timeout-interval

```

RPCs None

Actions None

brocade-eld

Description Provides a data model for configuring global parameters for Edge-Loop-Detection. Interface parameters are modeled in the brocade-interface module.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-interface
  +--rw protocol
    +--rw eld:edge-loop-detection
      +--rw eld:pdu-rx-limit?   uint32
      +--rw eld:hello-interval? uint32
      +--rw eld:shutdown-time? uint32
```

RPCs None

Actions None

brocade-Enclosure-show

Description	Provides a data model for obtaining the enclosure related information on embedded platforms.
Top-level containers	None
External augmentations	<p>Nodes that augment other modules and their subtrees follow.</p> <pre> module: brocade-common-def +--rw show +--rw Enclosure-show:enclosure </pre>
RPCs	None
Actions	<p>Run to check the present slot-id of switch:</p> <pre> module: brocade-common-def +--rw show +--rw Enclosure-show:enclosure +--ro Enclosure-show:slotid +--ro Enclosure-show:input </pre> <p>Run to check the chassis model name:</p> <pre> module: brocade-common-def +--rw show +--rw Enclosure-show:enclosure +--ro Enclosure-show:modelname +--ro Enclosure-show:input </pre>

brocade-fabric-service

Description Provides a data model for managing VCS fabric-related information. VCS fabric refers to the ability of a group of physical Ethernet switches, inter-connected in an arbitrary way using the regular front-end data ports, to present themselves as one unified and transparent Ethernet switching service to the external network.

The inter-connecting network that contains the individual switches is referred as the *fabric*. The group of physical Ethernet switches in the fabric is referred to as the *cluster*.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-fabric-service
  +--rw fabric
    x--rw route
      +--rw mcast
        +--rw rbridge-id [rbridge-id]
          +--rw rbridge-id common-def:rbridge-id-type
          +--rw priority? common-def:mcast-priority-type
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
    | +--rw fabric-service:fabric
    | | +--rw fabric-service:route

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw fabric-service:fabric
    | +--rw fabric-service:ecmp
    | | +--rw fabric-service:ecmp-load-balance? enumeration
    | | +--rw fabric-service:load-balance-hash-swap? hashswap-type
    | +--rw fabric-service:route
    | | +--rw fabric-service:mcast
    | | +--rw fabric-service:priority? common-def:mcast-priority-type
    | +--rw fabric-service:port-channel [po-id]
    | +--rw fabric-service:po-id uint32
    | +--rw fabric-service:vlag-load-balance? enumeration
```

RPCs Custom RPCs defined in this module follow.

```
+---x show-linkinfo
  | +--ro input
  | | +--ro all? empty
  | +--ro output
  | | +--ro show-link-info [linkinfo-rbridgeid]
  | | | +--ro linkinfo-rbridgeid common-def:rbridge-id-type
  | | | +--ro linkinfo-domain-reachable? linkinfo-domain-reachable-type
  | | | +--ro linkinfo-wwn? common-def:wwn-type
  | | | +--ro linkinfo-version? uint32
  | | | +--ro linkinfo-isl [linkinfo-isl-linknumber]
  | | | | +--ro linkinfo-isl-linknumber uint32
  | | | | +--ro linkinfo-isllink-destdomain?
  | | | | +--ro linkinfo-isllink-srcport? uint16
  | | | | +--ro linkinfo-isllink-srcport-type? interfacetype-type
  | | | | +--ro linkinfo-isllink-srcport-interface?
  | | | | +--ro linkinfo-isllink-destport? uint16
```

```

|         +--ro linkinfo-isl-linkcost?                uint32
|         +--ro linkinfo-isllink-costcount?          uint32
|         +--ro linkinfo-isllink-type?              uint32
|         +--ro linkinfo-trunked?                  linkinfo-trunked-type
+---x show-portindex-interface-info
|   +--ro input
|   | +--ro all?    empty
|   +--ro output
|   | +--ro show-portindex-interface [portsgroup-rbridgeid]
|   |   +--ro portsgroup-rbridgeid    common-def:rbridge-id-type
|   |   +--ro show-portindex [port-index]
|   |     +--ro port-index            uint32
|   |     +--ro port-type?            ethernet-port-type
|   |     +--ro port-interface?      interface:interface-type
+--ro input
| +--ro all?    empty
+--ro output
  +--ro show-fibrechannel-interface [portsgroup-rbridgeid]
  +--ro portsgroup-rbridgeid        common-def:rbridge-id-type
  +--ro show-fibrechannel-info [port-index]
    +--ro port-interface?            interface:interface-type
    +--ro port-index                  uint32
    +--ro port-type?                  porttype-type
    +--ro port-wnn?                   common-def:wnn-type
    +--ro remote-port-wnn?            common-def:wnn-type
    +--ro remote-node-wnn?            common-def:wnn-type
    +--ro port-state?                 string
    +--ro port-status?                string
    +--ro port-status-message?        string
    +--ro port-health?                string
    +--ro port-trunked?               boolean
    +--ro port-trunk-master?          uint32
    +--ro port-actual-distance?       uint32
    +--ro port-desired-credit?        uint32
    +--ro port-buffer-allocated?      uint32
    +--ro port-licensed?              boolean
    +--ro port-address?               fabric-portid-type

```

Actions Proprietary actions defined in this module follow.

Obtain the entire VCS fabric membership information:

```

module: brocade-common-def
  +--rw show
  |   +--rw fabric-service:fabric
  |   |   +--ro fabric-service:all
  |   |   |   +--ro fabric-service:input
  |   |   |   +--ro fabric-service:output
  |   |   |   +--ro fabric-service:fabric-showall-cluster
  |   |   |   [fabric-showall-rbridge-id]
  |   |   |   |   +--ro fabric-service:fabric-showall-rbridge-id
  |   |   |   |   common-def:rbridge-id-type
  |   |   |   |   +--ro fabric-service:fabric-showall-wnn?
  |   |   |   |   common-def:wnn-type
  |   |   |   |   +--ro fabric-service:fabric-showall-ipaddress?
  |   |   |   |   common-def:inet-address-type
  |   |   |   |   |   +--ro fabric-service:fabric-showall-name?      string
  |   |   |   |   |   +--ro fabric-service:fabric-showall-version?  string
  |   |   |   |   |   +--ro fabric-service:fabric-showall-swbd-number? int32
  |   |   |   |   |   +--ro fabric-service:fabric-is-principalswitch? boolean

```

```

    | | |      +---ro fabric-service:fabric-showall-ipv6address?
common-def:inet-address-type

```

Obtain ISL information:

```

module: brocade-common-def
+---rw show
| +---rw fabric-service:fabric
| | +---ro fabric-service:isl
| | | +---ro fabric-service:input
| | |   +---ro (rbridge-id-or-all)?
| | |     +---:(rbridge-id)
| | |       | +---ro fabric-service:rbridge-id?  common-def:rbridge-id-type
| | |       +---:(all)
| | |         +---ro fabric-service:all?          empty

```

Obtain detailed information about all ISL ports:

```

module: brocade-common-def
+---rw show
| +---rw fabric-service:fabric
| | +---ro fabric-service:islports
| | | +---ro fabric-service:input
| | |   +---ro fabric-service:rbridge-id?  common-def:rbridge-id-type

```

Obtain ISL trunk information:

```

module: brocade-common-def
+---rw show
| +---rw fabric-service:fabric
| | +---ro fabric-service:trunk
| | | +---ro fabric-service:input
| | |   +---ro (rbridge-id-or-all)?
| | |     +---:(rbridge-id)
| | |       | +---ro fabric-service:rbridge-id?  common-def:rbridge-id-type
| | |       +---:(all)
| | |         +---ro fabric-service:all?          empty
| | |       +---ro fabric-service:output
| | |         +---ro fabric-service:show-trunk-list
| | |           +---ro fabric-service:trunk-list-groups
| | |             +---ro fabric-service:trunk-list-group?  uint32
| | |               +---ro fabric-service:trunk-list-member
| | |                 +---ro fabric-service:trunk-list-src-port?  uint32
| | |                   +---ro fabric-service:trunk-list-interface-type?
interfacetype-type
| | | | +---ro fabric-service:trunk-list-src-interface?
interface:interface-type
| | | | +---ro fabric-service:trunk-list-nbr-rbridge-id?  uint32
| | | | +---ro fabric-service:trunk-list-nbr-port?        uint32
| | | | +---ro fabric-service:trunk-list-nbr-wwn?
common-def:wwn-type
| | | | +---ro fabric-service:trunk-list-is-primary?
trunk-list-is-primary-type

```

Obtain multicast routing information:

```

module: brocade-common-def
+---rw show
| +---rw fabric-service:fabric
| | +---rw fabric-service:route
| | | +---ro fabric-service:multicast
| | |   +---ro fabric-service:input
| | |     +---ro (rbridge-id-or-all)?

```

```

| | | | +--:(rbridge-id)
| | | | | +--ro fabric-service:rbridge-id?
common-def:rbridge-id-type
| | | | +--:(all)
| | | | | +--ro fabric-service:all? empty

```

Obtain fabric topology information from the perspective of a VCS fabric node:

```

module: brocade-common-def
+--rw show
| +--rw fabric-service:fabric
| | +--rw fabric-service:route
| | | +--ro fabric-service:topology
| | | | +--ro fabric-service:input
| | | | +--ro fabric-service:dest-rbridge-id?
common-def:rbridge-id-type
| | | | +--ro fabric-service:src-rbridge-id?
common-def:rbridge-id-type

```

Obtain routing information and states along a path that includes multiple switches:

```

module: brocade-common-def
+--rw show
| +--rw fabric-service:fabric
| | +--rw fabric-service:route
| | | +--ro fabric-service:pathinfo
| | | | +--ro fabric-service:input

```

Obtains link information for all the links in the fabric:

```

module: brocade-common-def
+--rw show
| +--rw fabric-service:fabric
| | +--rw fabric-service:route
| | | +--ro fabric-service:linkinfo
| | | | +--ro fabric-service:input
| | | | +--ro fabric-service:output
| | | | +--ro fabric-service:show-link-info [linkinfo-rbridgeid]
| | | | +--ro fabric-service:linkinfo-rbridgeid
common-def:rbridge-id-type
| | | | +--ro fabric-service:linkinfo-domain-reachable?
linkinfo-domain-reachable-type
| | | | +--ro fabric-service:linkinfo-wwn?
common-def:wwn-type
| | | | +--ro fabric-service:linkinfo-version? uint32
| | | | +--ro fabric-service:linkinfo-isl [linkinfo-isl-linknumber]
| | | | | +--ro fabric-service:linkinfo-isl-linknumber
uint32
| | | | +--ro fabric-service:linkinfo-isl-link-destdomain?
common-def:rbridge-id-type
| | | | +--ro fabric-service:linkinfo-isl-link-srcport?
uint16
| | | | +--ro fabric-service:linkinfo-isl-link-srcport-type?
interfacetype-type
| | | | +--ro fabric-service:linkinfo-isl-link-srcport-interface?
interface:interface-type
| | | | +--ro fabric-service:linkinfo-isl-link-destport?
uint16
| | | | +--ro fabric-service:linkinfo-isl-link-destport-type?
interfacetype-type

```

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```
    | | | +--ro fabric-service:linkinfo-isllink-destport-interface?
interface:interface-type
    | | | +--ro fabric-service:linkinfo-isllink-cost?
uint32
    | | | +--ro fabric-service:linkinfo-isllink-costcount?
uint32
    | | | +--ro fabric-service:linkinfo-isllink-type?
uint32
    | | | +--ro fabric-service:linkinfo-trunked?
linkinfo-trunked-type
```

Obtain the Fabric Shortest Path First (FSPF) link state information for a VCS fabric node:

```
module: brocade-common-def
  +--rw show
  | +--rw fabric-service:fabric
  | | +--rw fabric-service:route
  | | | +--ro fabric-service:neighbor-state
  | | | +--ro fabric-service:input
  | | | +--ro (rbridge-id-or-all)?
  | | | +--:(rbridge-id)
  | | | | +--ro fabric-service:rbridge-id?
common-def:rbridge-id-type
  | | +--:(all)
  | | +--ro fabric-service:all? empty
```


brocade-fc-auth

Description Provides a data model for configuring Fibre Channel authentication through Fibre Channel Security Protocol (FCSP) and Switch Connection Control (SCC) security policy parameters.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-fc-auth
  +--rw fcsp
  |   +--rw auth-secret
  +--rw fcsp-sa
  |   +--rw fcsp
  |       +--rw auth
  |           +--rw proto
  |               | +--rw auth-type?   fcsp-authtype
  |               | +--rw group?       string
  |               | +--rw hash?        fcsp-hashtype
  |               +--rw policy
  |                   +--rw switch?    fcsp-switch-policy-state
  +--rw secpolicy
  |   +--rw action
  +--rw secpolicy-sa
  |   +--rw secpolicy
  |       +--rw defined-policy
  |           | +--rw policies [policy]
  |           |   +--rw policy          secpolicy-type
  |           |   +--rw member-entry [member]
  |           |       +--rw member      string
  |       +--rw active-policy
  |           +--rw policies [policy]
  |               +--rw policy          secpolicy-type
  |               +--rw member-entry [member]
  |                   +--rw member      string

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-common-def
  +--rw show
  |   +--rw brcd-fc-auth:fcsp
  |       +--rw brcd-fc-auth:authsecret

module: brocade-common-def
  +--rw no
  |   +--rw brcd-fc-auth:fcsp
  |       +--rw brcd-fc-auth:auth-secret

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  |   +--rw brcd-fc-auth:fcsp
  |       | +--rw brcd-fc-auth:auth
  |       |   +--rw brcd-fc-auth:proto
  |       |       | +--rw brcd-fc-auth:auth-type?   fcsp-authtype
  |       |       | +--rw brcd-fc-auth:group?       string
  |       |       | +--rw brcd-fc-auth:hash?        fcsp-hashtype
  |       |       +--rw brcd-fc-auth:policy
  |       |           +--rw brcd-fc-auth:switch?    fcsp-switch-policy-state
  +--rw rbridge-id [rbridge-id]

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]

```

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```

+--rw brocade-fc-auth:secpolicy
|   +--rw brocade-fc-auth:defined-policy
|   |   +--rw brocade-fc-auth:policies [policy]
|   |   |   +--rw brocade-fc-auth:policy          secpolicy-type
|   |   |   +--rw brocade-fc-auth:member-entry [member]
|   |   |   |   +--rw brocade-fc-auth:member      string
|   |   +--rw brocade-fc-auth:active-policy
|   |   |   +--rw brocade-fc-auth:policies [policy]
|   |   |   |   +--rw brocade-fc-auth:policy          secpolicy-type
|   |   |   |   +--rw brocade-fc-auth:member-entry [member]
|   |   |   |   |   +--rw brocade-fc-auth:member      string

```

RPCs None

Actions Proprietary actions defined in this module follow.

Configure the authorization secret for DH-CHAP:

```

module: brocade-fc-auth
+--rw fcsp
|   +--rw auth-secret
|   |   +--ro dhchap
|   |   |   +--ro input
|   |   |   |   +--ro node          string
|   |   |   |   +--ro peer-secret?  string
|   |   |   |   +--ro local-secret? string
|   |   +--ro output
|   |   |   +--ro result?  string

```

Return the device WWN for which a shared secret is configured:

```

module: brocade-common-def
+--rw show
|   +--rw brocade-fc-auth:fcsp
|   |   +--rw brocade-fc-auth:authsecret
|   |   |   +--ro brocade-fc-auth:dhchap
|   |   |   |   +--ro brocade-fc-auth:input
|   |   |   |   +--ro brocade-fc-auth:output
|   |   |   |   |   +--ro brocade-fc-auth:auth-show-secret [nodeid]
|   |   |   |   |   |   +--ro brocade-fc-auth:nodeid      string

```

Delete the authorization secret for DH-CHAP:

```

module: brocade-common-def
+--rw no
|   +--rw brocade-fc-auth:fcsp
|   |   +--rw brocade-fc-auth:auth-secret
|   |   |   +--ro brocade-fc-auth:dhchap
|   |   |   |   +--ro brocade-fc-auth:input
|   |   |   |   |   +--ro (op)?
|   |   |   |   |   |   +--:(node)
|   |   |   |   |   |   |   +--ro brocade-fc-auth:node      common-def:wwn-type
|   |   |   |   |   |   |   +--:(all)
|   |   |   |   |   |   |   |   +--ro brocade-fc-auth:all    empty

```

Activate all the defined FC authorization policies:

```

module: brocade-fc-auth
+--rw secpolicy
|   +--rw action
|   |   +--ro activate

```

```
|      +--ro input  
|      | +--ro rbridge-id?   common-def:rbridge-id-all-type  
|      +--ro output
```

brocade-fcoe

Description Provides a data model for managing the Fibre Channel over Ethernet (FCoE) feature. It provides a mechanism to configure FCoE maps and the FCoE interface.

FCoE is an encapsulation of Fibre Channel frames over Ethernet networks which allows Fibre Channel to use 10 Gigabit Ethernet networks (or higher speeds) while preserving the Fibre Channel protocol.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-fcoe
  +--rw fcoe-fsb
  |   +--rw fcoe-fsb-enable?   empty
  +--rw fcoe
    +--rw fcoe-fabric-map [fcoe-fabric-map-name]
      |   +--rw fcoe-fabric-map-name           fcoe-fabric-map-name-type
      |   +--rw fcoe-fabric-map-vlan?         fcoe-vlan-type
      |   +--rw fcoe-fabric-map-priority?     fcoe-priority-type
      |   +--rw fcoe-fabric-map-virtual-fabric? fcoe-vfid-type
      |   +--rw fcoe-fabric-map-fcmap?       fcoe-fcmap-type
      |   +--rw fcoe-fabric-map-max-enodes?  fcoe-max-enodes-per-rbridge-type
      |   +--rw fcoe-fabric-map-enodes-cfg?  fcoe-enodes-cfg-type
      |   +--rw fcoe-fip-advertisement
      |   |   +--rw fcoe-fip-advertisement-interval? int32
      |   +--rw fcoe-fip-keep-alive
      |   |   +--rw fcoe-fip-keep-alive-timeout? empty
      +--rw fcoe-map [fcoe-map-name]
        +--rw fcoe-map-name           fcoe-map-name-type
        +--rw fcoe-map-fabric-map [fcoe-map-fabric-map-name]
          |   +--rw fcoe-map-fabric-map-name   fcoe-fabric-map-name-type
        +--rw fcoe-map-cee-map
          +--rw fcoe-map-cee-map-leaf? fcoe-cee-map-name-type
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   |   +--rw fcoe:fabric
  |   |   |   +--rw fcoe:neighbor-discovery
  |   |   |   +--rw fcoe:disable? empty

module: brocade-interface
  +--rw interface
  |   +--rw tengigabitethernet [name]
  |   |   +--rw fcoe:fabric
  |   |   |   +--rw fcoe:fabric-isl
  |   |   |   |   +--rw fcoe:fabric-isl-enable? empty
  |   |   |   +--rw fcoe:fabric-trunk
  |   |   |   |   +--rw fcoe:fabric-trunk-enable? empty
  |   |   |   +--rw fcoe:neighbor-discovery
  |   |   |   +--rw fcoe:disable? empty
  |   |   +--rw fcoe:fcoeport
  |   |   |   +--rw fcoe:fcoeport-map? fcoe-map-name-type

module: brocade-interface
  +--rw interface
  |   +--rw fortygigabitethernet [name]
  
```

```

| | +--rw fcoe:fabric
| | | +--rw fcoe:fabric-isl
| | | | +--rw fcoe:fabric-isl-enable? empty
| | | +--rw fcoe:fabric-trunk
| | | | +--rw fcoe:fabric-trunk-enable? empty
| | | +--rw fcoe:neighbor-discovery
| | | | +--rw fcoe:disable? empty
| | +--rw fcoe:fcoeport
| | | +--rw fcoe:fcoeport-map? fcoe-map-name-type

module: brocade-interface
+--rw interface
| +--rw hundredgigabitethernet [name]
| | +--rw fcoe:fabric
| | | +--rw fcoe:fabric-isl
| | | | +--rw fcoe:fabric-isl-enable? empty
| | | +--rw fcoe:fabric-trunk
| | | | +--rw fcoe:fabric-trunk-enable? empty
| | | +--rw fcoe:neighbor-discovery
| | | | +--rw fcoe:disable? empty
| | +--rw fcoe:fcoeport
| | | +--rw fcoe:fcoeport-map? fcoe-map-name-type

module: brocade-interface
+--rw interface
| +--rw fcoe:fcoe [fcoe-interface-name]
| | +--rw fcoe:fcoe-interface-name interface-fcoe-type
| | +--rw fcoe:fcoe-interface-shutdown? empty
| | +--rw fcoe:fcoe-interface-bind
| | | +--rw (fcoe-interface-bind-type)?
| | | | +--:(fcoe-interface-bind-te)
| | | | | +--rw fcoe:fcoe-interface-bind-te? empty
| | | | | +--:(fcoe-interface-bind-fo)
| | | | | | +--rw fcoe:fcoe-interface-bind-fo? empty
| | | | | +--:(fcoe-interface-bind-po)
| | | | | | +--rw fcoe:fcoe-interface-bind-po? empty
| | | | | +--:(fcoe-interface-bind-mac)
| | | | | | +--rw fcoe:fcoe-interface-bind-mac? empty
| | | | | +--:(fcoe-interface-bind-hu)
| | | | | | +--rw fcoe:fcoe-interface-bind-hu? empty
| | +--rw fcoe:fcoe-interface-bind-name? string

module: brocade-interface
+--rw interface
| +--rw port-channel [name]
| | +--rw fcoe:fcoeport
| | | +--rw fcoe:fcoeport-map? fcoe-map-name-type

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
+--rw fcoe:fcoe-config
| +--rw fcoe:fcoe-enode-fabric-map [fcoe-enode-fabric-map-name]
| | +--rw fcoe:fcoe-enode-fabric-map-name
fcoe-enode-fabric-map-name-type
| +--rw fcoe:fcoe-max-enode?
fcoe-max-enodes-per-rbridge-type

```

RPCs None

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Actions None

brocade-fcoe-ext

Description	Provides extensions to the brocade-fcoe module, including custom RPCs for returning operational information about FCoE ports and logins.
Top-level containers	None
External augmentations	None

RPCs Custom RPCs defined in this module follow.

```

+---x get-vlan-brief
  | +--ro input
  | | +--ro (request-type)?
  | | | +--ro (get-request)
  | | | | +--ro vlan-id?          interface:vlan-type
  | | | +--ro (get-next-request)
  | | | | +--ro last-rcvd-vlan-id? interface:vlan-type
  | +--ro output
  | | +--ro vlan [vlan-id]
  | | | +--ro vlan-id          interface:vlan-type
  | | | +--ro vlan-type?      enumeration
  | | | +--ro vlan-name?     string
  | | | +--ro vlan-state?    enumeration
  | | | +--ro interface [interface-type interface-name]
  | | | | +--ro interface-type enumeration
  | | | | +--ro interface-name union
  | | | | +--ro tag?          enumeration
  | | | | +--ro classification [classification-type classification-value]
  | | | | | +--ro classification-type enumeration
  | | | | | +--ro classification-value string
  | | | +--ro last-vlan-id?  interface:vlan-type
  | | | +--ro has-more?     boolean
  +---x get-interface-switchport
  | +--ro output
  | | +--ro switchport [interface-type interface-name]
  | | | +--ro interface-type enumeration
  | | | +--ro interface-name union
  | | | +--ro mode?          interface:switchport-mode-type
  | | | +--ro fcoe-port-enabled? boolean
  | | | +--ro ingress-filter-enabled? boolean
  | | | +--ro acceptable-frame-type? enumeration
  | | | +--ro default-vlan?  interface:vlan-type
  | | | +--ro active-vlans
  | | | | +--ro vlanid*      interface:vlan-type
  | | | +--ro inactive-vlans
  | | | | +--ro vlanid*      interface:vlan-type
  +---x get-ip-interface
  | +--ro input
  | | +--ro (request-type)?
  | | | +--ro (get-request)
  | | | | +--ro interface-type? enumeration
  | | | | +--ro interface-name? union
  | | | | +--ro rbridge-id?    uint32
  | +--ro output
  | | +--ro interface [interface-type interface-name]

```

```

| | +--ro interface-type          enumeration
| | +--ro interface-name        union
| | +--ro if-name?              string
| | +--ro ip-address [ipv4]
| | | +--ro ipv4                string
| | | +--ro ipv4-type?          enumeration
| | | +--ro broadcast?          string
| | | +--ro ip-mtu?             interface:mtu-type
| | +--ro if-state?             enumeration
| | +--ro line-protocol-state?  enumeration
| | +--ro proxy-arp?            string
| | +--ro vrf?                  string
| +--ro has-more?               boolean
+---x get-interface-detail
  +--ro input
  | +--ro (request-type)?
  | | +--:(get-request)
  | | | +--ro interface-type?    enumeration
  | | | +--ro interface-name?    union
  | | +--:(get-next-request)
  | | | +--ro last-rcvd-interface
  | | | | +--ro interface-type?  enumeration
  | | | | +--ro interface-name?  union
  +--ro output
  +--ro interface [interface-type interface-name]
  | +--ro interface-type          enumeration
  | +--ro interface-name        union
  | +--ro ifindex?               uint64
  | +--ro mtu?                   interface:mtu-type
  | +--ro ip-mtu?                interface:mtu-type
  | +--ro if-name?               string
  | +--ro if-state?              enumeration
  | +--ro line-protocol-state?   enumeration
  | +--ro line-protocol-state-info? string
  | +--ro line-protocol-exception-info? string
  | +--ro hardware-type?         enumeration
  | +--ro logical-hardware-address? yang:mac-address
  | +--ro current-hardware-address? yang:mac-address
  | +--ro media-type?            enumeration
  | +--ro wavelength?            uint32
  | +--ro if-description?        string
  | +--ro actual-line-speed?     string
  | +--ro configured-line-speed? line-speed
  | +--ro line-duplex-state?     enumeration
  | +--ro flow-control?          bits
  | +--ro queuing-strategy?      enumeration
  | +--ro port-role?             enumeration
  | +--ro port-mode?             enumeration
  +--ro has-more?                boolean
+---x get-media-detail
  +--ro input
  | +--ro interface-type?        enumeration
  | +--ro interface-name?        union
  +--ro output
  +--ro interface [interface-type interface-name]
  | +--ro interface-type          enumeration
  | +--ro interface-name        union
  | +--ro (interface-identifier)?
  | | +--:(sfp)
  | | | +--ro sfp

```



```

|         +--ro speed?                line-speed
|         +--ro connector?            enumeration
|         +--ro encoding?             enumeration
|         +--ro vendor-name?          string
|         +--ro vendor-oui?           string
|         +--ro vendor-pn?            string
|         +--ro vendor-rev?           string
|         +--ro distance?             enumeration
|         +--ro media-form-factor?    enumeration
|         +--ro wavelength?           string
|         +--ro serial-no?            string
|         +--ro date-code?            string
|         +--ro temperature?          uint32
|         +--ro voltage?              decimal64
|         +--ro current?              decimal64
|         +--ro tx-power?             decimal64
|         +--ro rx-power?             decimal64
+---: (on-board)
|   +--ro on-board
|     +--ro speed?                    line-speed
|     +--ro connector?                enumeration
|     +--ro encoding?                 enumeration
|     +--ro vendor-name?              string
|     +--ro vendor-oui?               string
|     +--ro vendor-pn?                string
|     +--ro vendor-rev?               string
+---: (gbic)
|   +--ro gbic
|     +--ro vendor-name?              string
|     +--ro vendor-oui?               string
|     +--ro vendor-pn?                string
|     +--ro vendor-rev?               string
+---: (xftp)
|   +--ro xftp
|     +--ro vendor-name?              string
|     +--ro vendor-oui?               string
|     +--ro vendor-pn?                string
|     +--ro vendor-rev?               string
+---: (unknown)
|   +--ro unknown
|     +--ro vendor-name?              string
|     +--ro vendor-oui?               string
|     +--ro vendor-pn?                string
|     +--ro vendor-rev?               string
+---: (qsfp)
|   +--ro qsfp
|     +--ro speed?                    line-speed
|     +--ro connector?                enumeration
|     +--ro encoding?                 enumeration
|     +--ro vendor-name?              string
|     +--ro vendor-oui?               string
|     +--ro vendor-pn?                string
|     +--ro vendor-rev?               string
|     +--ro distance?                 enumeration
|     +--ro media-form-factor?        enumeration
|     +--ro wavelength?               string
|     +--ro serial-no?                string
|     +--ro date-code?                string
|     +--ro temperature?              uint32
|     +--ro voltage?                  decimal64

```

2 brocade-fcoe-ext

```
|      +--ro current?          decimal64
|      +--ro tx-power?        decimal64
|      +--ro rx-power?        decimal64
+--:(qsfp)
  +--ro qsfp
    +--ro speed?              line-speed
    +--ro connector?         enumeration
    +--ro encoding?          enumeration
    +--ro vendor-name?       string
    +--ro vendor-oui?        string
    +--ro vendor-pn?         string
    +--ro vendor-rev?        string
    +--ro distance?          enumeration
    +--ro media-form-factor? enumeration
    +--ro wavelength?        string
    +--ro serial-no?         string
    +--ro date-code?         string
    +--ro temperature?       uint32
    +--ro voltage?           decimal64
    +--ro current?           decimal64
    +--ro tx-power?          decimal64
    +--ro rx-power?          decimal64
```

Actions None

brocade-firmware

Description Provides a data model for managing the download of firmware and for reporting firmware download status. It includes the custom actions listed in [Table 2](#).

TABLE 2 Custom actions for firmware version management

Action	Purpose
<ftp>	Download firmware with FTP.
<scp>	Download firmware with SCP.
<usb>	Download firmware from a USB device.
<interactive>	Download firmware interactively.
<commit>	Commits a firmware upgrade after evaluation.
<restore>	Restores a firmware version.
<sync>	Synchronizes the firmware with its peer.
<fastboot>	Reboots the control processor (CP), bypassing the power-on self-tests (POSTs).

Top-level containers

Top-level nodes and their subtree hierarchies follow.

```
module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--rw default-config
  |   |   +--rw logical-chassis
  |   |   |   +--rw default-config
  |   +--rw auto-sync
  |   +--rw autoupgrade
  |   +--rw autoupgrade-params
  +--rw reboot
  +--rw dhcp
  +--rw auto-deployment
```

External augmentations

Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw firmware:dhcp-auto-deployment
```

RPCs

Custom RPCs defined in this module follow.

```
+---x fwdl-status
  |   +--ro input
  |   |   +--ro fwdl-tid?   int32
  |   +--ro output
  |   |   +--ro number-of-entries?  uint32
  |   |   +--ro fwdl-state?         enumeration
  |   |   +--ro fwdl-entries
  |   |   |   +--ro index?           uint32
  |   |   |   +--ro message-id?      int32
  |   |   |   +--ro date-and-time-info?  string
  |   |   |   +--ro message?         string
  |   |   |   +--ro blade-slot?      int32
```

```

|         +--ro blade-swbd?           int32
|         +--ro blade-name?          string
|         +--ro blade-state?         enumeration
|         +--ro blade-app?           string
+---x activate-status
| +--ro input
| | +--ro rbridge-id?   rbridge-ids-all-type
+--ro output
| +--ro overall-status?   int32
| +--ro overall-error-msg? string
| +--ro activate-entries
| | +--ro rbridge-id?   common-def:rbridge-id-type
| | +--ro status?      int32
+---x logical-chassis-fwld-sanity
| +--ro input
| | +--ro user           string
| | +--ro password?     string
| | +--ro host           string
| | +--ro directory     string
| | +--ro file?         string
| | +--ro rbridge-id    rbridge-ids-all-type
| | +--ro (cluster-options)?
| | | +---:(auto-activate)
| | | | +--ro auto-activate? empty
| | | +---:(coldboot)
| | | | +--ro coldboot?     empty
| | +--ro protocol      enumeration
+--ro output
| +--ro fwld-cmd-status? int32
| +--ro fwld-cmd-msg?   string
+--ro cluster-output
| +--ro rbridge-id?    uint32
| +--ro fwld-status?  int32
| +--ro fwld-msg?     string
+---x logical-chassis-fwld-status
| +--ro input
| | +--ro rbridge-id?   rbridge-ids-all-type
+--ro output
| +--ro overall-status?   int32
+--ro cluster-fwld-entries
| +--ro rbridge-id?    uint32
| +--ro fwld-state?    enumeration
+--ro fwld-entries
| +--ro index?         uint32
| +--ro message-id?    int32
| +--ro date-and-time-info? string
| +--ro message?       string
| +--ro blade-slot?    int32
| +--ro blade-swbd?    int32
| +--ro blade-name?    string
| +--ro blade-state?   enumeration
| +--ro blade-app?     string
+---x dad-status
| +--ro output
| | +--ro dad-last-state? enumeration
+--ro dad-status-entries
| +--ro index?         uint32
| +--ro date-and-time-info? string
| +--ro message?       string

```

Actions Proprietary actions defined in this module follow.

Download firmware from an FTP server:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro ftp
  |   |   |   +--ro input
  |   |   |   |   +--ro user          string
  |   |   |   |   +--ro password?     string
  |   |   |   |   +--ro host          string
  |   |   |   |   +--ro directory     string
  |   |   |   |   +--ro file?        string
  |   |   |   |   +--ro (options)?
  |   |   |   |   |   +---:(manual)
  |   |   |   |   |   |   +--ro manual?      empty
  |   |   |   |   |   |   +--ro noreboot?   empty
  |   |   |   |   |   |   +--ro nocommit?   empty
  |   |   |   |   |   +---:(noactivate)
  |   |   |   |   |   |   +--ro noactivate?  empty
  |   |   |   |   |   +---:(coldboot)
  |   |   |   |   |   |   +--ro coldboot?   empty
  |   |   |   +--ro output
  |   |   |   |   +--ro fwdl-tid?      int32
  |   |   |   |   +--ro fwdl-status?   int32
  |   |   |   |   +--ro fwdl-msg?     string

```

Download firmware from an SFTP server:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro sftp
  |   |   |   +--ro input
  |   |   |   |   +--ro user          string
  |   |   |   |   +--ro password?     string
  |   |   |   |   +--ro host          string
  |   |   |   |   +--ro directory     string
  |   |   |   |   +--ro file?        string
  |   |   |   |   +--ro (options)?
  |   |   |   |   |   +---:(manual)
  |   |   |   |   |   |   +--ro manual?      empty
  |   |   |   |   |   |   +--ro noreboot?   empty
  |   |   |   |   |   |   +--ro nocommit?   empty
  |   |   |   |   |   +---:(noactivate)
  |   |   |   |   |   |   +--ro noactivate?  empty
  |   |   |   |   |   +---:(coldboot)
  |   |   |   |   |   |   +--ro coldboot?   empty
  |   |   |   +--ro output
  |   |   |   |   +--ro fwdl-tid?      int32
  |   |   |   |   +--ro fwdl-status?   int32
  |   |   |   |   +--ro fwdl-msg?     string

```

Download firmware from an SCP server:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro scp
  |   |   |   +--ro input
  |   |   |   |   +--ro user          string

```

```

| | | | +--ro password?    string
| | | | +--ro host        string
| | | | +--ro directory   string
| | | | +--ro file?       string
| | | | +--ro (options)?
| | | | |   +---:(manual)
| | | | |   | +--ro manual?    empty
| | | | |   | +--ro noreboot?  empty
| | | | |   | +--ro nocommit?  empty
| | | | |   +---:(noactivate)
| | | | |   | +--ro noactivate? empty
| | | | |   +---:(coldboot)
| | | | |   | +--ro coldboot?  empty
| | | | +--ro output
| | | | |   +--ro fwdl-tid?    int32
| | | | |   +--ro fwdl-status? int32
| | | | |   +--ro fwdl-msg?   string

```

Download firmware from a USB device:

```

module: brocade-firmware
+--rw firmware
| +--rw download
| | +--ro usb
| | | +--ro input
| | | | +--ro directory    string
| | | | +--ro (options)?
| | | | |   +---:(manual)
| | | | |   | +--ro manual?    empty
| | | | |   | +--ro noreboot?  empty
| | | | |   | +--ro nocommit?  empty
| | | | |   +---:(noactivate)
| | | | |   | +--ro noactivate? empty
| | | | |   +---:(coldboot)
| | | | |   | +--ro coldboot?  empty
| | | | +--ro output
| | | | |   +--ro fwdl-tid?    int32
| | | | |   +--ro fwdl-status? int32
| | | | |   +--ro fwdl-msg?   string

```

Download firmware interactively:

```

module: brocade-firmware
+--rw firmware
| +--rw download
| | +--ro interactive
| | | +--ro input
| | | +--ro output
| | | +--ro result?  string

```

Default Configuration on the FTP server:

```

module: brocade-firmware
+--rw firmware
| +--rw download
| | +--rw default-config
| | | +--ro ftp
| | | | +--ro input
| | | | |   +--ro user        string
| | | | |   +--ro password?  string
| | | | |   +--ro host        string

```

```

| | | | | +---ro directory    string
| | | | | +---ro file?       string
| | | | | +---ro manual?     empty
| | | | | +---ro noreboot?   empty
| | | | | +---ro rbridgeid?  common-def:rbridge-id-type
| | | | | +---ro vcs-id?     uint32
| | | | | +---ro vcs-mode?   uint32
| | | | | +---ro output
| | | | |   +---ro fwdl-tid?    int32
| | | | |   +---ro fwdl-status? int32
| | | | |   +---ro fwdl-msg?   string

```

Default Configuration on the SCP server:

```

module: brocade-firmware
  +---rw firmware
  |   +---rw download
  |   |   +---rw default-config
  |   |   |   +---ro scp
  |   |   |   |   +---ro input
  |   |   |   |   |   +---ro user        string
  |   |   |   |   |   +---ro password?   string
  |   |   |   |   |   +---ro host        string
  |   |   |   |   |   +---ro directory   string
  |   |   |   |   |   +---ro file?      string
  |   |   |   |   |   +---ro manual?    empty
  |   |   |   |   |   +---ro noreboot?   empty
  |   |   |   |   |   +---ro rbridgeid?  common-def:rbridge-id-type
  |   |   |   |   |   +---ro vcs-id?    uint32
  |   |   |   |   |   +---ro vcs-mode?   uint32
  |   |   |   |   +---ro output
  |   |   |   |   |   +---ro fwdl-tid?    int32
  |   |   |   |   |   +---ro fwdl-status? int32
  |   |   |   |   |   +---ro fwdl-msg?   string

```

Default Configuration on the SFTP server

```

module: brocade-firmware
  +---rw firmware
  |   +---rw download
  |   |   +---rw default-config
  |   |   |   +---ro sftp
  |   |   |   |   +---ro input
  |   |   |   |   |   +---ro user        string
  |   |   |   |   |   +---ro password?   string
  |   |   |   |   |   +---ro host        string
  |   |   |   |   |   +---ro directory   string
  |   |   |   |   |   +---ro file?      string
  |   |   |   |   |   +---ro manual?    empty
  |   |   |   |   |   +---ro noreboot?   empty
  |   |   |   |   |   +---ro rbridgeid?  common-def:rbridge-id-type
  |   |   |   |   |   +---ro vcs-id?    uint32
  |   |   |   |   |   +---ro vcs-mode?   uint32
  |   |   |   |   +---ro output
  |   |   |   |   |   +---ro fwdl-tid?    int32
  |   |   |   |   |   +---ro fwdl-status? int32
  |   |   |   |   |   +---ro fwdl-msg?   string

```

Default Configuration on a USB device:

```

module: brocade-firmware
  +--rw firmware
    | +--rw download
    | | +--rw default-config
    | | | +--ro usb
    | | | | +--ro input
    | | | | | +--ro directory    string
    | | | | | +--ro manual?      empty
    | | | | | +--ro noreboot?    empty
    | | | | | +--ro rbridgeid?  common-def:rbridge-id-type
    | | | | | +--ro vcs-id?      uint32
    | | | | | +--ro vcs-mode?   uint32
    | | | | +--ro output
    | | | | | +--ro fwdl-tid?    int32
    | | | | | +--ro fwdl-status? int32
    | | | | | +--ro fwdl-msg?   string
  
```

Logical Chassis Configuration on a FTP server:

```

module: brocade-firmware
  +--rw firmware
    | +--rw download
    | | +--rw logical-chassis
    | | | +--ro ftp
    | | | | +--ro input
    | | | | | +--ro user          string
    | | | | | +--ro password?    string
    | | | | | +--ro host          string
    | | | | | +--ro directory     string
    | | | | | +--ro file?         string
    | | | | | +--ro rbridge-id    rbridge-ids-all-type
    | | | | | +--ro (cluster-options)?
    | | | | | | +--:(auto-activate)
    | | | | | | | +--ro auto-activate? empty
    | | | | | | +--:(coldboot)
    | | | | | | | +--ro coldboot?   empty
    | | | | +--ro output
    | | | | | +--ro fwdl-cmd-status? int32
    | | | | | +--ro fwdl-cmd-msg?   string
    | | | | +--ro cluster-output
    | | | | | +--ro rbridge-id?    uint32
    | | | | | +--ro fwdl-status?   int32
    | | | | | +--ro fwdl-msg?     string
  
```

Logical Chassis Configuration on a SCP server:

```

module: brocade-firmware
  +--rw firmware
    | +--rw download
    | | +--rw logical-chassis
    | | | +--ro scp
    | | | | +--ro input
    | | | | | +--ro user          string
    | | | | | +--ro password?    string
    | | | | | +--ro host          string
    | | | | | +--ro directory     string
    | | | | | +--ro file?         string
    | | | | | +--ro rbridge-id    rbridge-ids-all-type
  
```



```

| | | | | +--ro (cluster-options)?
| | | | |   +--:(auto-activate)
| | | | |   | +--ro auto-activate?   empty
| | | | |   +--:(coldboot)
| | | | |   +--ro coldboot?         empty
| | | | | +--ro output
| | | | |   +--ro fwdl-cmd-status?   int32
| | | | |   +--ro fwdl-cmd-msg?     string
| | | | |   +--ro cluster-output
| | | | |     +--ro rbridge-id?     uint32
| | | | |     +--ro fwdl-status?    int32
| | | | |     +--ro fwdl-msg?      string

```

Logical Chassis Configuration on a SFTP server:

```

module: brocade-firmware
+--rw firmware
| +--rw download
| | +--rw logical-chassis
| | | +--ro sftp
| | | +--ro input
| | | | +--ro user           string
| | | | +--ro password?     string
| | | | +--ro host           string
| | | | +--ro directory      string
| | | | +--ro file?          string
| | | | +--ro rbridge-id     rbridge-ids-all-type
| | | | +--ro (cluster-options)?
| | | |   +--:(auto-activate)
| | | |   | +--ro auto-activate?   empty
| | | |   +--:(coldboot)
| | | |   +--ro coldboot?       empty
| | | | +--ro output
| | | |   +--ro fwdl-cmd-status?   int32
| | | |   +--ro fwdl-cmd-msg?     string
| | | |   +--ro cluster-output
| | | |     +--ro rbridge-id?     uint32
| | | |     +--ro fwdl-status?    int32
| | | |     +--ro fwdl-msg?      string

```

Logical Chassis default configuration on a FTP server:

```

module: brocade-firmware
+--rw firmware
| +--rw download
| | +--rw logical-chassis
| | | +--rw default-config
| | | +--ro ftp
| | | | +--ro input
| | | | | +--ro user           string
| | | | | +--ro password?     string
| | | | | +--ro host           string
| | | | | +--ro directory      string
| | | | | +--ro file?          string
| | | | | +--ro rbridge-id     rbridge-ids-all-type
| | | | +--ro output
| | | |   +--ro fwdl-cmd-status?   int32
| | | |   +--ro fwdl-cmd-msg?     string
| | | |   +--ro cluster-output

```


Firmware download sanity check:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro sanity-check
  |   |   |   +--ro input
  |   |   |   |   +--ro user          string
  |   |   |   |   +--ro password?    string
  |   |   |   |   +--ro host          string
  |   |   |   |   +--ro directory     string
  |   |   |   |   +--ro file?         string
  |   |   |   |   +--ro protocol      string
  |   |   |   |   +--ro rbridge-id    rbridge-ids-all-type
  |   |   |   +--ro output
  |   |   |   |   +--ro fwdl-tid?     int32
  |   |   |   |   +--ro fwdl-status?  int32
  |   |   |   |   +--ro fwdl-msg?    string

```

Restore a firmware version:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro restore
  |   |   |   +--ro input
  |   |   |   +--ro output
  |   |   |   +--ro result?  string

```

Synchronize firmware to peer processor:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro sync
  |   |   |   +--ro input
  |   |   |   +--ro output
  |   |   |   +--ro result?  string

```

Activate the firmware:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro activate
  |   |   |   +--ro input
  |   |   |   |   +--ro rbridge-id?  rbridge-ids-all-type
  |   |   |   +--ro output
  |   |   |   |   +--ro overall-status?    int32
  |   |   |   |   +--ro overall-error-msg? string
  |   |   |   |   +--ro activate-output [rbridge-id]
  |   |   |   |   +--ro rbridge-id        common-def:rbridge-id-type
  |   |   |   |   +--ro status?          int32

```

Recover a firmware:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw download
  |   |   +--ro recover
  |   |   |   +--ro input
  |   |   |   |   +--ro rbridge-id?  rbridge-ids-all-type
  |   |   |   +--ro output

```

```
| | +--ro result? string
```

Auto-synchronize the firmware:

```
module: brocade-firmware
+--rw firmware
| +--rw auto-sync
| | +--ro enable
| | | +--ro input
| | | +--ro output
| | | +--ro result? string
| | +--ro disable
| | | +--ro input
| | | +--ro output
| | | +--ro result? string
```

Firmware clean-install using FTP:

```
module: brocade-firmware
+--rw firmware
| +--rw install
| | +--ro ftp
| | | +--ro input
| | | | +--ro user string
| | | | +--ro password? string
| | | | +--ro host string
| | | | +--ro directory string
| | | | +--ro file? string
| | | | +--ro manual? empty
| | | | +--ro rbridgeid? common-def:rbridge-id-type
| | | | +--ro vcs-id? uint32
| | | | +--ro vcs-mode? uint32
| | | +--ro output
| | | | +--ro fwdl-tid? int32
| | | | +--ro fwdl-status? int32
| | | | +--ro fwdl-msg? string
```

Firmware clean-install using SCP:

```
module: brocade-firmware
+--rw firmware
| +--rw clean-install
| | +--ro scp
| | | +--ro input
| | | | +--ro user string
| | | | +--ro password? string
| | | | +--ro host string
| | | | +--ro directory string
| | | | +--ro file? string
| | | | +--ro manual? empty
| | | | +--ro rbridgeid? common-def:rbridge-id-type
| | | | +--ro vcs-id? uint32
| | | | +--ro vcs-mode? uint32
| | | +--ro output
| | | | +--ro fwdl-tid? int32
| | | | +--ro fwdl-status? int32
| | | | +--ro fwdl-msg? string
```

Auto-upgrade the firmware:

```

module: brocade-firmware
  +--rw firmware
  |   +--rw autoupgrade
  |   |   +--rw enable?    empty
  |   +--rw autoupgrade-params
  |   |   +--rw path?      string
  |   |   +--rw protocol?  enumeration
  |   |   +--rw ipaddress? string
  |   |   +--rw username?  string
  |   |   +--rw pass?      string

```

Reload the system without running POSTs:

```

module: brocade-firmware
  +--rw reboot
  |   +--ro fastboot
  |   +--ro input

```

Enable the deployment of firmware download:

```

module: brocade-firmware
  +--rw dhcp
  |   +--rw auto-deployment
  |   |   +--ro enable
  |   |   +--ro input
  |   |   +--ro output
  |   |   +--ro dad-cmd-msg?  string

```

Retrieve the current status of firmware download:

```

module: brocade-common-def
  +--rw show
  |   +--rw firmware:dhcp-auto-deployment
  |   |   +--ro firmware:dadstatus
  |   |   +--ro firmware:input
  |   |   +--ro firmware:output
  |   |   +--ro firmware:result?  string

```

brocade-firmware-ext

Description Provides a data model with extensions to the brocade-firmware model for reporting firmware information.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw firmware-extensions:firmware
```

RPCs Custom RPCs defined in this module follow.

Return firmware version information:

```
+---x show-firmware-version
  +--ro input
  |   +--ro switchid?   ras-extensions:switchid-type
  +--ro output
  |   +--ro show-firmware-version
  |       +--ro switchid?           ras-extensions:switchid-type
  |       +--ro os-name?            string
  |       +--ro os-version?         string
  |       +--ro copy-right-info?    string
  |       +--ro build-time?         string
  |       +--ro firmware-full-version? string
  |       +--ro control-processor-vendor? string
  |       +--ro control-processor-chipset? string
  |       +--ro control-processor-memory? string
  |       +--ro node-info
  |           +--ro slot-no?         uint32
  |           +--ro node-instance-no? uint32
  |           +--ro node-type?       node-type-enum
  |           +--ro is-active-cp?    boolean
  |           +--ro firmware-version-info
  |               +--ro application-name? string
  |               +--ro primary-version? string
  |               +--ro secondary-version? string
```

Actions Proprietary actions defined in this module follow.

Return the firmware download status:

```
module: brocade-common-def
  +--rw show
  |   +--rw firmware-extensions:firmware
  |   |   +--ro firmware-extensions:firmwaredownloadstatus
  |   |   |   +--ro firmware-extensions:input
  |   |   |   |   +--ro firmware-extensions:rbridge-id?
  |   |   |   |   ras-extensions:switchid-type
  |   |   |   |   +--ro firmware-extensions:brief?           empty
  |   |   |   |   +--ro firmware-extensions:summary?         empty
  |   |   |   |   +--ro firmware-extensions:logical-chassis? empty
  |   |   |   +--ro firmware-extensions:output
  |   |   +--ro firmware-extensions:result?   string
```

Return the firmware download history:

```

module: brocade-common-def
  +--rw show
  |   +--rw firmware-extensions:firmware
  |   |   +--ro firmware-extensions:firmwaredownloadhistory
  |   |   |   +--ro firmware-extensions:input
  |   |   |   |   +--ro firmware-extensions:rbridge-id?   string
  |   |   |   +--ro firmware-extensions:output
  |   |   |   +--ro firmware-extensions:result?   string

```

Check firmware:

```

module: brocade-common-def
  +--rw show
  |   +--rw firmware-extensions:firmware
  |   |   +--ro firmware-extensions:firmware
  |   |   |   +--ro firmware-extensions:input
  |   |   |   |   +--ro firmware-extensions:auto-sync?   enumeration
  |   |   |   +--ro firmware-extensions:output
  |   |   |   +--ro firmware-extensions:result?   string

```

Return the firmware version string:

```

module: brocade-common-def
  +--rw show
  |   +--rw firmware-extensions:firmware
  |   |   +--ro firmware-extensions:version
  |   |   |   +--ro firmware-extensions:input
  |   |   |   |   +--ro firmware-extensions:rbridge-id?
  |   |   |   ras-extensions:switchid-type
  |   |   |   |   +--ro firmware-extensions:brief?   empty
  |   |   |   |   +--ro firmware-extensions:all-partitions?   empty
  |   |   |   +--ro firmware-extensions:output
  |   |   |   +--ro firmware-extensions:result?   string

```

Return firmware features:

```

module: brocade-common-def
  +--rw show
  |   +--rw firmware-extensions:firmware
  |   |   +--ro firmware-extensions:firmware-features
  |   |   |   +--ro firmware-extensions:input
  |   |   |   +--ro firmware-extensions:output
  |   |   |   +--ro firmware-extensions:result?   string

```

brocade-hardware

Description Provides a data model for managing connectors. It can be used to breakout the connectors and set the type of the connectors.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-hardware
  +--rw hardware
    +--rw connector [name]
      | +--rw name      interface:interface-type
      | +--rw sfp
      |   +--rw breakout?  empty
    +--rw port-group [name]
      +--rw name      interface:port-group-type
      +--rw mode
        +--rw performance?  empty
```

External augmentations None

RPCs None

Actions None

brocade-ha

Description Provides a data model for:

- Enabling and disabling high availability
- Displaying high availability status information,
- Rebooting the chassis
- Performing failover
- Displaying the high availability state

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-ha
  +--rw ha
  |   +--rw sync
  +--rw system

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-common-def
  +--rw show
  |   +--rw ha:ha

module: brocade-common-def
  +--rw show
  |   +--rw ha:redundancy

```

RPCs None

Actions Proprietary actions defined in this module follow.

Enable HA:

```

module: brocade-ha
  +--rw ha
  |   +--ro enable
  |   |   +--ro input

```

Disable HA:

```

module: brocade-ha
  +--rw ha
  |   +--ro disable
  |   |   +--ro input

```

Dump HA:

```

module: brocade-ha
  +--rw ha
  |   +--ro dump
  |   |   +--ro input

```

Reboot HA:

```

module: brocade-ha
  +--rw ha
  |   +--ro chassisreboot

```

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```
| | +--ro input
```

Check HA failover

```
module: brocade-ha
  +--rw ha
  |   +--ro failover
  |   |   +--ro input
```

Start HA synchronization:

```
module: brocade-ha
  +--rw ha
  |   +--rw sync
  |   |   +--ro start
  |   |   |   +--ro input
  |   |   |   +--ro output
  |   |   |   +--ro result?   string
```

Stop HA synchronization:

```
module: brocade-ha
  +--rw ha
  |   +--rw sync
  |   |   +--ro stop
  |   |   |   +--ro input
  |   |   |   +--ro output
  |   |   |   +--ro result?   string
```

Reboot the system:

```
module: brocade-ha
  +--rw system
  |   +--ro reload
  |   |   +--ro input
  |   |   |   +--ro rbridge-id?   ras-extensions:switchid-type
  |   |   |   +--ro system?       empty
  |   |   |   +--ro standby?      empty
  |   |   |   +--ro output
```

```
module: brocade-common-def
  +--rw show
  |   +--rw ha:ha
  |   |   +--ro ha:ha
  |   |   |   +--ro ha:input
  |   |   |   +--ro ha:rbridge-id?   ras-extensions:switchid-type
  |   |   |   +--ro ha:all-partitions? empty
```

Display the current HA redundancy state:

```
module: brocade-common-def
  +--rw show
  |   +--rw ha:redundancy
  |   |   +--ro ha:redundancy
  |   |   |   +--ro ha:input
  |   |   |   +--ro ha:rbridge-id?   ras-extensions:switchid-type
```

brocade-icmp

Description Provides a data model for configuring ICMP parameters like echo reply, rate-limiting and unreachable destination which are used in controlling ICMP frames.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
  +--rw brocade-interface:interface
    | | +--rw ip-config:ip
    | | | +--rw icmp:interface-ve-icmp-conf
    | | | | +--rw icmp:icmp
    | | | | +--rw icmp:echo-reply?      empty
    | | | | +--rw icmp:rate-limiting?   uint64
    | | | | +--rw icmp:unreachable?    empty

```

```

module: brocade-interface
+--rw interface
  | +--rw fortygigabitethernet [name]
  | | +--rw ip
  | | | +--rw icmp:interface-phy-icmp-conf
  | | | | +--rw icmp:icmp
  | | | | +--rw icmp:echo-reply?      empty
  | | | | +--rw icmp:rate-limiting?   uint64
  | | | | +--rw icmp:unreachable?    empty

```

```

module: brocade-interface
+--rw interface
  | +--rw tengigabitethernet [name]
  | | +--rw ip
  | | | +--rw icmp:interface-phy-icmp-conf
  | | | | +--rw icmp:icmp
  | | | | +--rw icmp:echo-reply?      empty
  | | | | +--rw icmp:rate-limiting?   uint64
  | | | | +--rw icmp:unreachable?    empty

```

```

module: brocade-interface
+--rw interface
  | +--rw gigabitethernet [name]
  | | +--rw ip
  | | | +--rw icmp:interface-phy-icmp-conf
  | | | | +--rw icmp:icmp
  | | | | +--rw icmp:echo-reply?      empty
  | | | | +--rw icmp:rate-limiting?   uint64
  | | | | +--rw icmp:unreachable?    empty

```

RPCs None

Actions None

brocade-igmp

Description Provides a data model for configuring the Internet Group Management Protocol (IGMP). IGMP alleviates excessive traffic caused by Layer 2 forwarding of received multicast packets.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
  +--rw brocade-interface:interface
    | | +--rw ip-config:ip
    | | | +--rw igmp:igmp
    | | | | +--rw igmp:last-member-query-interval? igmp-snooping:lmqt-type
    | | | | +--rw igmp:query-interval? igmp-snooping:qi-type
    | | | | +--rw igmp:query-max-response-time? igmp-snooping:qmrt-type
    | | | | +--rw igmp:immediate-leave? empty
    | | | | +--rw igmp:static-group [sg-addr]
    | | | | +--rw igmp:sg-addr inet:ipv4-address

```

```

module: brocade-interface
+--rw interface-vlan
  | +--rw interface
  | | +--rw ve [name]
  | | | +--rw igmp:igmp
  | | | | +--rw igmp:last-member-query-interval? igmp-snooping:lmqt-type
  | | | | +--rw igmp:query-interval? igmp-snooping:qi-type
  | | | | +--rw igmp:query-max-response-time? igmp-snooping:qmrt-type
  | | | | +--rw igmp:immediate-leave? empty
  | | | | +--rw igmp:static-group [sg-addr]
  | | | | +--rw igmp:sg-addr inet:ipv4-address

```

```

module: brocade-interface
+--rw interface
  | +--rw hundredgigabitethernet[name]
  | | +--rw ip
  | | | +--rw igmp:igmp-phy-intf-cfg
  | | | | +--rw igmp:igmp
  | | | | | +--rw igmp:last-member-query-interval? igmp-snooping:lmqt-type
  | | | | | +--rw igmp:query-interval? igmp-snooping:qi-type
  | | | | | +--rw igmp:query-max-response-time? igmp-snooping:qmrt-type
  | | | | | +--rw igmp:immediate-leave? empty
  | | | | | +--rw igmp:static-group [sg-addr]
  | | | | | +--rw igmp:sg-addr inet:ipv4-address

```

```

module: brocade-interface
+--rw interface
  | +--rw fortygigabitethernet [name]
  | | +--rw ip
  | | | +--rw igmp:igmp-phy-intf-cfg
  | | | | +--rw igmp:igmp
  | | | | | +--rw igmp:last-member-query-interval? igmp-snooping:lmqt-type
  | | | | | +--rw igmp:query-interval? igmp-snooping:qi-type
  | | | | | +--rw igmp:query-max-response-time? igmp-snooping:qmrt-type
  | | | | | +--rw igmp:immediate-leave? empty
  | | | | | +--rw igmp:static-group [sg-addr]

```

```

| | | |      +---rw igmp:sg-addr      inet:ipv4-address

module: brocade-interface
+---rw interface
| +---rw tengigabitethernet [name]
| | +---rw ip
| | | +---rw igmp:igmp-phy-intf-cfg
| | | | +---rw igmp:igmp
| | | | | +---rw igmp:last-member-query-interval?  igmp-snooping:lmqt-type
| | | | | +---rw igmp:query-interval?              igmp-snooping:qi-type
| | | | | +---rw igmp:query-max-response-time?    igmp-snooping:qmrt-type
| | | | | +---rw igmp:immediate-leave?            empty
| | | | | +---rw igmp:static-group [sg-addr]
| | | | | +---rw igmp:sg-addr      inet:ipv4-address

module: brocade-interface
+---rw interface
| +---rw gigabitethernet [name]
| | +---rw ip
| | | +---rw igmp:igmp-phy-intf-cfg
| | | | +---rw igmp:igmp
| | | | | +---rw igmp:last-member-query-interval?  igmp-snooping:lmqt-type
| | | | | +---rw igmp:query-interval?              igmp-snooping:qi-type
| | | | | +---rw igmp:query-max-response-time?    igmp-snooping:qmrt-type
| | | | | +---rw igmp:immediate-leave?            empty
| | | | | +---rw igmp:static-group [sg-addr]
| | | | | +---rw igmp:sg-addr      inet:ipv4-address

```

RPCs None

Actions None

brocade-igmp-snooping

Description Provides a data model for configuring the Internet Group Management Protocol (IGMP) snooping. IGMP snooping alleviates excessive traffic caused by Layer 2 forwarding of received multicast packets.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-igmp-snooping
  +--rw igmp-snooping
    +--rw ip
      +--rw igmp
        +--rw snooping
          +--rw enable?  empty
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
+--rw interface-vlan
  | +--rw interface
  |   +--rw vlan [name]
  |     +--rw ip
  |       +--rw igmp-snooping:igmp
  |         +--rw igmp-snooping:last-member-query-interval?  lmq-type
  |         +--rw igmp-snooping:query-interval?               qi-type
  |         +--rw igmp-snooping:query-max-response-time?     qmrt-type
  |         +--rw igmp-snooping:snooping
  |           +--rw igmp-snooping:enable?                    empty
  |           +--rw igmp-snooping:fast-leave?                empty
  |           +--rw igmp-snooping:mrouter-timeout?           mrti-type
  |           +--rw igmp-snooping:querier
  |             +--rw igmp-snooping:qenable?                 empty
  |           +--rw igmp-snooping:mrouter
  |             +--rw igmp-snooping:interface [if-type value]
  |               +--rw igmp-snooping:if-type                enumeration
  |               +--rw igmp-snooping:value                  string-type
  |             +--rw igmp-snooping:static-group [mcast-address interface if-type
value]
  |           +--rw igmp-snooping:mcast-address              inet:ipv4-address
  |           +--rw igmp-snooping:interface                  enumeration
  |           +--rw igmp-snooping:if-type                    enumeration
  |           +--rw igmp-snooping:value                      string-type
  
```

RPCs None

Actions None

brocade-interface

Description Provides the data model for managing Ethernet network interfaces and their sublayers.

[Table 3](#) lists the Ethernet interfaces and other entities modeled by high-level nodes in this management module.

TABLE 3 Entities managed through brocade-interface module

High-level node name	Description
interface/fc-port	Models Fibre Channel interfaces
interface/fortygigabitethernet	Models 40 GbE physical Ethernet interfaces
interface/gigabitethernet	Models 1 GbE physical Ethernet interfaces
interface/management	Models the management port or management interfaces
interface/port-channel	Models port-channel or LAG interfaces
interface/tengigabitethernet	Models 10 GbE physical Ethernet interfaces
interface/hundredgigabitethernet	Models 100 GbE physical Ethernet interfaces
interface-vlan	Models Layer 2 VLAN interfaces
protocol	Models protocol configuration and status
reserved-vlan	Models the reserved VLAN configuration

This module provides the mechanism to support the following actions:

- Discover and characterize the interface sublayers.
- Configure various attributes of these interfaces.
- Structure the interfaces such that various Layer 2 or Layer 3 access and security policies, network discovery policies, QoS policies, and link aggregation policies can be applied using other modules supported by the managed entity.

Top-level containers

Top-level nodes and their subtree hierarchies follow.

High level nodes:

```
module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   +--rw tengigabitethernet [name]
  |   +--rw fortygigabitethernet [name]
  |   +--rw hundredgigabitethernet [name]
  |   +--rw port-channel [name]
  |   +--rw management [name]
  |   +--rw fc-port [name]
  +--rw interface-vlan
  |   +--rw interface
  +--rw protocol
  +--rw reserved-vlan
```

interface/fc-port:

```
module: brocade-interface
  +--rw interface
  |   +--rw fc-port [name]
  |       +--rw name                interface-type
  |       +--rw fc-speed-cfg?      fc-speed-cfg-type
```

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```
|      +--rw fill-word?          fc-fillword-cfg-type
|      +--rw long-distance?     fc-long-distance-cfg-type
|      +--rw vc-link-init?     fc-vc-link-init-cfg-type
|      +--rw desire-distance?  desire-distance-type
|      +--rw isl-r_rdy-mode?    empty
|      +--rw trunk-enable?     empty
|      +--rw shutdown?         empty
|      +--rw config-mode?     interface-fc-config-mode-type
```

interface/gigabitethernet:

module: brocade-interface

```
+--rw interface
|
| +--rw gigabitethernet [name]
| |
| | +--rw name                interface-type
| | +--ro ifindex?           uint64
| | +--rw description?      string
| | +--rw shutdown?         empty
| | +--rw channel-group
| | | +--rw port-int?       portchannel-type
| | | +--rw mode?           po-mode
| | | +--rw type?           po-type
| | +--rw mtu?               mtu-type
| | +--rw switchport-basic
| | | +--rw basic?         empty
| | +--rw switchport
| | | +--rw port-security?
| | | | +--rw port-sec-max?          uint32
| | | | +--rw port-sec-violation?   port-sec-violation
| | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | +--rw mac-address         mac-address-type
| | | | | +--rw port-sec-vlan      vlan-type
| | | | +--rw sticky?
| | | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | | +--rw mac-address         mac-address-type
| | | | | | +--rw port-sec-vlan      vlan-type
| | | | +--rw allowed-ouis [oui]
| | | | | +--rw oui                 oui-type
| | | | +--rw shutdown-time?       uint32
| | +--rw mode
| | | +--rw vlan-mode?             12-mode-type
| | +--rw private-vlan
| | | +--rw private-vlan-trunk
| | | | +--rw trunk-basic?         empty
| | | | +--rw trunk-promiscuous?   empty
| | | | +--rw trunk-host?         empty
| | | +--rw promiscuous?          empty
| | | +--rw host?                 empty
| | +--rw access
| | | +--rw accessvlan?           vlan-type
| | | +--rw rspan-access
| | | | +--rw rspan-access-vlan?  vlan-type
| | +--rw access-mac-vlan-classification
| | | +--rw access
| | | | +--rw vlan [access-vlan-id access-mac-address]
| | | | | +--rw access-vlan-id     vlan-type
| | | | | +--rw access-mac-address mac-address-type
| | +--rw trunk-private-vlan-classification
| | | +--rw private-vlan
```



```

+--rw trunk
  +--rw allowed
    +--rw vlan
      +--rw add [trunk-vlan-id trunk-ctag-id]
        | +--rw trunk-vlan-id    non-dot1q-vlan-type
        | +--rw trunk-ctag-id    dot1q-vlan-type
      +--rw remove [trunk-vlan-id trunk-ctag-id]
        +--rw trunk-vlan-id    non-dot1q-vlan-type
        +--rw trunk-ctag-id    dot1q-vlan-type
+--rw access-mac-group-vlan-classification
  +--rw access
    +--rw vlan [access-vlan-id access-mac-group]
      +--rw access-vlan-id      vlan-type
      +--rw access-mac-group    mac-group-id-type
+--rw trunk
  +--rw allowed
    | +--rw vlan
    | | +--rw all?          empty
    | | +--rw none?        empty
    | | +--rw add?         ui32-vlan-range
    | | +--rw except?     ui32-vlan-range
    | | +--rw remove?     ui32-vlan-range
  x--rw vlanoper
    | +--rw vlan
    | | +--rw add?         ui32-vlan-range
    | | +--rw remove?     ui32-vlan-range
  +--rw rspan-vlan
    | +--rw add-rspan-trunk-vlan?    ui32-vlan-range
    | +--rw remove-rspan-trunk-vlan? ui32-vlan-range
  +--rw trunk-rspan-vlan-classification
    +--rw rspan-vlan
      +--rw add [trunk-vlan-id trunk-ctag-id]
        | +--rw trunk-vlan-id    non-dot1q-vlan-type
        | +--rw trunk-ctag-id    dot1q-vlan-type
      +--rw remove [trunk-vlan-id trunk-ctag-id]
        +--rw trunk-vlan-id    non-dot1q-vlan-type
        +--rw trunk-ctag-id    dot1q-vlan-type
  +--rw trunk-vlan-classification
    | +--rw allowed
    | +--rw vlan
    | | +--rw add [trunk-vlan-id]
    | | | +--rw trunk-vlan-id    non-dot1q-vlan-type
    | | | +--rw trunk-ctag-range? ui32-ctag-range
    | | +--rw remove [trunk-vlan-id]
    | | | +--rw trunk-vlan-id    non-dot1q-vlan-type
    | | | +--rw trunk-ctag-range? ui32-ctag-range
  +--rw default-vlan-config
    | +--rw default-transparent-vlan? non-dot1q-vlan-type
  +--rw tag?
    | +--rw native-vlan?    empty
  +--rw native-vlan-classification
    +--rw native-vlan-id?    native-vlan-type
    +--rw native-vlan-ctag-id? dot1q-vlan-type
+--rw private-vlan
  +--rw trunk
    | +--rw native
    | | +--rw pvlanNativevlan?    vlan-type
    | | +--rw pvlan-native-vlan-ctag-id? dot1q-vlan-type
    +--rw allowed
      +--rw vlan

```

2 brocade-interface

```

      +--rw pvlan_all?      empty
      +--rw pvlan_none?    empty
      +--rw pvlan_add?     ui32-vlan-range
      +--rw pvlan_except?  ui32-vlan-range
      +--rw pvlan_remove?  ui32-vlan-range
    +--rw host-association
      | +--rw host-pri-pvlan?  vlan-type
      | +--rw host-sec-pvlan?  vlan-type
    +--rw association
      | +--rw trunk [trunk-pri-pvlan trunk-sec-pvlan]
      |   +--rw trunk-pri-pvlan  vlan-type
      |   +--rw trunk-sec-pvlan  vlan-type
    +--rw mapping [promis-pri-pvlan]
      | +--rw promis-pri-pvlan  vlan-type
      | +--rw oper?            secVlan-opp-type
      | +--rw promis-sec-pvlan-range?  ui32-range-8091
    +--rw access-mac-rspan-vlan-classification
      | +--rw access
      |   +--rw vlan [access-vlan-id access-mac-address]
      |     +--rw access-vlan-id  vlan-type
      |     +--rw access-mac-address  mac-address-type
    +--rw access-mac-group-rspan-vlan-classification
      | +--rw access
      |   +--rw vlan [access-vlan-id access-mac-group]
      |     +--rw access-vlan-id  vlan-type
      |     +--rw access-mac-group  mac-group-id-type
    +--rw ip
    +--rw vrf
      | +--rw forwarding?  common-def:vrf-name
    +--rw ipv6
      | +--rw ra-guard?    empty
    +--rw edge-loop-detection
      | +--rw eldprio?    uint32
      | +--rw eldvlan?    ui32-eldvlan-range

```

interface/management:

```

module: brocade-interface
  +--rw interface
    | +--rw management [name]
    |   +--rw name      man-interface-type
    |   +--rw tcp
    |     | +--rw tcp_burstrate?  uint32
    |     | +--rw tcp_lockdown?  uint32
    |   +--rw ip
    |     | +--rw icmp
    |     |   | +--rw unreachable?  empty
    |     |   | +--rw echo_reply?   empty
    |     |   | +--rw rate_limiting? uint32
    |     |   +--rw address
    |     |     | +--rw dhcp?      empty
    |     |     | +--rw ip-address?  common-def:ipv4-address-prefix-type
    |     |   +--rw gateway
    |     |     | +--rw gateway-address?  inet:ipv4-address
    |     |   +--rw oper-address
    |     |     | +--rw oper-ip-address?  common-def:ipv4-address-prefix-type
    |     |   +--rw oper-gateway-con
    |     |     | +--rw oper-gateway?  inet:ipv4-address
    |   +--rw ipv6

```

```

| | | +--rw icmpv6
| | | | +--rw v6_unreachable?    empty
| | | | +--rw v6_echo_reply?     empty
| | | | +--rw v6_rate_limiting?  uint32
| | | +--rw ipv6-address-cont
| | | | +--rw ipv6-global-address? common-def:ipv6-address-prefix
| | | | +--rw autoconfig?        empty
| | | | +--rw dhcpv6?            empty
| | | +--ro ipv6-address*        string
| | | +--ro ipv6-gateways*       string
| | +--rw speed?                enumeration
| | +--rw line-speed
| | | +--ro actual?             string
| | | +--ro configured?        string

```

interface/port-channel:

module: brocade-interface

```

+--rw interface
| +--rw port-channel [name]
| | +--rw name                portchannel-type
| | +--rw cee?                common-def:name-string32
| | +--rw vlag
| | | +--rw ignore-split?    empty
| | +--rw po-speed?          enumeration
| | +--ro ifindex?           uint64
| | +--rw description?       string
| | +--rw shutdown?          empty
| | +--rw minimum-links?     uint32
| | +--rw mtu?                mtu-type
| | +--rw switchport-basic
| | | +--rw basic?           empty
| | +--rw switchport
| | | +--rw port-security?
| | | | +--rw port-sec-max?   uint32
| | | | +--rw port-sec-violation? port-sec-violation
| | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | +--rw mac-address   mac-address-type
| | | | | +--rw port-sec-vlan  vlan-type
| | | | +--rw sticky?
| | | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | | +--rw mac-address   mac-address-type
| | | | | | +--rw port-sec-vlan  vlan-type
| | | | +--rw allowed-ouis [oui]
| | | | | +--rw oui            oui-type
| | | +--rw shutdown-time?    uint32
| | +--rw mode
| | | +--rw vlan-mode?        l2-mode-type
| | | +--rw private-vlan
| | | | +--rw private-vlan-trunk
| | | | | +--rw trunk-basic?   empty
| | | | | +--rw trunk-promiscuous? empty
| | | | | +--rw trunk-host?    empty
| | | | +--rw promiscuous?    empty
| | | | +--rw host?           empty
| | +--rw access
| | | +--rw accessvlan?       vlan-type
| | +--rw access-mac-vlan-classification
| | | +--rw access
| | | | +--rw vlan [access-vlan-id access-mac-address]

```

```

        +--rw access-vlan-id          vlan-type
        +--rw access-mac-address      mac-address-type
+--rw trunk-private-vlan-classification
  +--rw private-vlan
    +--rw trunk
      +--rw allowed
        +--rw vlan
          +--rw add [trunk-vlan-id trunk-ctag-id]
            | +--rw trunk-vlan-id    non-dot1q-vlan-type
            | +--rw trunk-ctag-id    dot1q-vlan-type
          +--rw remove [trunk-vlan-id trunk-ctag-id]
            +--rw trunk-vlan-id    non-dot1q-vlan-type
            +--rw trunk-ctag-id    dot1q-vlan-type
+--rw access-mac-group-vlan-classification
  +--rw access
    +--rw vlan [access-vlan-id access-mac-group]
      +--rw access-vlan-id          vlan-type
      +--rw access-mac-group        mac-group-id-type
+--rw trunk
  +--rw allowed
    | +--rw vlan
    | | +--rw all?          empty
    | | +--rw none?         empty
    | | +--rw add?          ui32-vlan-range
    | | +--rw except?       ui32-vlan-range
    | | +--rw remove?       ui32-vlan-range
    | x--rw vlanoper
    |   +--rw vlan
    |     +--rw add?          ui32-vlan-range
    |     +--rw remove?       ui32-vlan-range
+--rw trunk-vlan-classification
  +--rw allowed
    +--rw vlan
      +--rw add [trunk-vlan-id]
        | +--rw trunk-vlan-id    non-dot1q-vlan-type
        | +--rw trunk-ctag-range? ui32-ctag-range
      +--rw remove [trunk-vlan-id]
        +--rw trunk-vlan-id    non-dot1q-vlan-type
        +--rw trunk-ctag-range? ui32-ctag-range
+--rw default-vlan-config
  | +--rw default-transparent-vlan? non-dot1q-vlan-type
+--rw tag?
  | +--rw native-vlan?          empty
+--rw native-vlan-classification
  +--rw native-vlan-id?          native-vlan-type
  +--rw native-vlan-ctag-id?     dot1q-vlan-type
+--rw private-vlan
  +--rw trunk
    +--rw native
      | +--rw pvlanNativevlan?    vlan-type
      | +--rw pvlan-native-vlan-ctag-id? dot1q-vlan-type
    +--rw allowed
      +--rw vlan
        +--rw pvlan_all?          empty
        +--rw pvlan_none?         empty
        +--rw pvlan_add?          ui32-vlan-range
        +--rw pvlan_except?       ui32-vlan-range
        +--rw pvlan_remove?       ui32-vlan-range
+--rw host-association
  | +--rw host-pri-pvlan?        vlan-type

```



```

|   |--rw trunk-promiscuous?   empty
|   |--rw trunk-host?         empty
|   +--rw promiscuous?        empty
|   +--rw host?                empty
+--rw access
|   +--rw accessvlan?         vlan-type
|   +--rw rspan-access
|       +--rw rspan-access-vlan?  vlan-type
+--rw access-mac-vlan-classification
|   +--rw access
|       +--rw vlan [access-vlan-id access-mac-address]
|           +--rw access-vlan-id     vlan-type
|           +--rw access-mac-address mac-address-type
+--rw trunk-private-vlan-classification
|   +--rw private-vlan
|       +--rw trunk
|           +--rw allowed
|               +--rw vlan
|                   +--rw add [trunk-vlan-id trunk-ctag-id]
|                       |   +--rw trunk-vlan-id     non-dot1q-vlan-type
|                       |   +--rw trunk-ctag-id     dot1q-vlan-type
|                       +--rw remove [trunk-vlan-id trunk-ctag-id]
|                           +--rw trunk-vlan-id     non-dot1q-vlan-type
|                           +--rw trunk-ctag-id     dot1q-vlan-type
+--rw access-mac-group-vlan-classification
|   +--rw access
|       +--rw vlan [access-vlan-id access-mac-group]
|           +--rw access-vlan-id     vlan-type
|           +--rw access-mac-group   mac-group-id-type
+--rw trunk
|   +--rw allowed
|       +--rw vlan
|           |   +--rw all?         empty
|           |   +--rw none?       empty
|           |   +--rw add?        ui32-vlan-range
|           |   +--rw except?     ui32-vlan-range
|           |   +--rw remove?     ui32-vlan-range
|       x--rw vlanoper
|           +--rw vlan
|               +--rw add?        ui32-vlan-range
|               +--rw remove?     ui32-vlan-range
+--rw rspan-vlan
|   +--rw add-rspan-trunk-vlan?    ui32-vlan-range
|   +--rw remove-rspan-trunk-vlan? ui32-vlan-range
+--rw trunk-rspan-vlan-classification
|   +--rw rspan-vlan
|       +--rw add [trunk-vlan-id trunk-ctag-id]
|           |   +--rw trunk-vlan-id     non-dot1q-vlan-type
|           |   +--rw trunk-ctag-id     dot1q-vlan-type
|       +--rw remove [trunk-vlan-id trunk-ctag-id]
|           +--rw trunk-vlan-id     non-dot1q-vlan-type
|           +--rw trunk-ctag-id     dot1q-vlan-type
+--rw trunk-vlan-classification
|   +--rw allowed
|       +--rw vlan
|           +--rw add [trunk-vlan-id]
|               |   +--rw trunk-vlan-id     non-dot1q-vlan-type
|               |   +--rw trunk-ctag-range? ui32-ctag-range
|           +--rw remove [trunk-vlan-id]
|               +--rw trunk-vlan-id     non-dot1q-vlan-type

```

```

|         | | | |         +---rw trunk-ctag-range?    ui32-ctag-range
+---rw default-vlan-config
|         | | | |         +---rw default-transparent-vlan?    non-dot1q-vlan-type
+---rw tag?
|         | | | |         +---rw native-vlan?    empty
+---rw native-vlan-classification
|         | | | |         +---rw native-vlan-id?    native-vlan-type
|         | | | |         +---rw native-vlan-ctag-id?    dot1q-vlan-type
+---rw private-vlan
|         | | | |         +---rw trunk
|         | | | |         |         +---rw native
|         | | | |         |         |         +---rw pvlanNativevlan?    vlan-type
|         | | | |         |         |         +---rw pvlan-native-vlan-ctag-id?    dot1q-vlan-type
+---rw allowed
|         | | | |         |         +---rw vlan
|         | | | |         |         |         +---rw pvlan_all?    empty
|         | | | |         |         |         +---rw pvlan_none?    empty
|         | | | |         |         |         +---rw pvlan_add?    ui32-vlan-range
|         | | | |         |         |         +---rw pvlan_except?    ui32-vlan-range
|         | | | |         |         |         +---rw pvlan_remove?    ui32-vlan-range
+---rw host-association
|         | | | |         |         +---rw host-pri-pvlan?    vlan-type
|         | | | |         |         +---rw host-sec-pvlan?    vlan-type
+---rw association
|         | | | |         |         +---rw trunk [trunk-pri-pvlan trunk-sec-pvlan]
|         | | | |         |         |         +---rw trunk-pri-pvlan    vlan-type
|         | | | |         |         |         +---rw trunk-sec-pvlan    vlan-type
+---rw mapping [promis-pri-pvlan]
|         | | | |         |         +---rw promis-pri-pvlan    vlan-type
|         | | | |         |         +---rw oper?    secVlan-opp-type
|         | | | |         |         +---rw promis-sec-pvlan-range?    ui32-range-8091
+---rw access-mac-rspan-vlan-classification
|         | | | |         |         +---rw access
|         | | | |         |         |         +---rw vlan [access-vlan-id access-mac-address]
|         | | | |         |         |         |         +---rw access-vlan-id    vlan-type
|         | | | |         |         |         |         +---rw access-mac-address    mac-address-type
+---rw access-mac-group-rspan-vlan-classification
|         | | | |         |         +---rw access
|         | | | |         |         |         +---rw vlan [access-vlan-id access-mac-group]
|         | | | |         |         |         |         +---rw access-vlan-id    vlan-type
|         | | | |         |         |         |         +---rw access-mac-group    mac-group-id-type
+---rw ip
+---rw vrf
|         | | | |         |         +---rw forwarding?    common-def:vrf-name
+---rw ipv6
|         | | | |         |         +---rw ra-guard?    empty
+---rw vepa
|         | | | |         |         +---rw vepa-enable?    empty
+---rw edge-loop-detection
|         | | | |         |         +---rw eldprio?    uint32
+---rw eldvlan?    ui32-eldvlan-range

```

interface/fortygigabitethernet:

```

module: brocade-interface
+---rw interface
|         | | | |         +---rw fortygigabitethernet [name]
|         | | | |         |         +---rw name    interface-type
|         | | | |         |         +---rw long-distance-is1?    enumeration
|         | | | |         |         +---rw cee?    common-def:name-string32

```

```

| | +--ro ifindex?                uint64
| | +--rw description?          string
| | +--rw shutdown?            empty
| | +--rw channel-group
| | | +--rw port-int?          portchannel-type
| | | +--rw mode?              po-mode
| | | +--rw type?              po-type
| | +--rw mtu?                  mtu-type
| | +--rw switchport-basic
| | | +--rw basic?            empty
| | +--rw switchport
| | | +--rw port-security?
| | | | +--rw port-sec-max?    uint32
| | | | +--rw port-sec-violation? port-sec-violation
| | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | +--rw mac-address    mac-address-type
| | | | | +--rw port-sec-vlan  vlan-type
| | | | +--rw sticky?
| | | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | +--rw mac-address    mac-address-type
| | | | | +--rw port-sec-vlan  vlan-type
| | | | +--rw allowed-ouis [oui]
| | | | | +--rw oui            oui-type
| | | | +--rw shutdown-time?   uint32
| | +--rw mode
| | | +--rw vlan-mode?         12-mode-type
| | | +--rw private-vlan
| | | | +--rw private-vlan-trunk
| | | | | +--rw trunk-basic?    empty
| | | | | +--rw trunk-promiscuous? empty
| | | | | +--rw trunk-host?    empty
| | | | +--rw promiscuous?     empty
| | | | +--rw host?            empty
| | +--rw access
| | | +--rw accessvlan?       vlan-type
| | | +--rw rspan-access
| | | | +--rw rspan-access-vlan? vlan-type
| | +--rw access-mac-vlan-classification
| | | +--rw access
| | | | +--rw vlan [access-vlan-id access-mac-address]
| | | | | +--rw access-vlan-id  vlan-type
| | | | | +--rw access-mac-address mac-address-type
| | +--rw trunk-private-vlan-classification
| | | +--rw private-vlan
| | | | +--rw trunk
| | | | | +--rw allowed
| | | | | | +--rw vlan
| | | | | | | +--rw add [trunk-vlan-id trunk-ctag-id]
| | | | | | | | +--rw trunk-vlan-id  non-dot1q-vlan-type
| | | | | | | | +--rw trunk-ctag-id  dot1q-vlan-type
| | | | | | | +--rw remove [trunk-vlan-id trunk-ctag-id]
| | | | | | | | +--rw trunk-vlan-id  non-dot1q-vlan-type
| | | | | | | | +--rw trunk-ctag-id  dot1q-vlan-type
| | +--rw access-mac-group-vlan-classification
| | | +--rw access
| | | | +--rw vlan [access-vlan-id access-mac-group]
| | | | | +--rw access-vlan-id  vlan-type
| | | | | +--rw access-mac-group mac-group-id-type
| | +--rw trunk
| | | +--rw allowed

```



```

+--rw vlan
|   +--rw all?      empty
|   +--rw none?    empty
|   +--rw add?     ui32-vlan-range
|   +--rw except?  ui32-vlan-range
|   +--rw remove?  ui32-vlan-range
x--rw vlanoper
|   +--rw vlan
|       +--rw add?      ui32-vlan-range
|       +--rw remove?   ui32-vlan-range
+--rw rspan-vlan
|   +--rw add-rspan-trunk-vlan?    ui32-vlan-range
|   +--rw remove-rspan-trunk-vlan? ui32-vlan-range
+--rw trunk-rspan-vlan-classification
+--rw rspan-vlan
+--rw add [trunk-vlan-id trunk-ctag-id]
|   +--rw trunk-vlan-id    non-dot1q-vlan-type
|   +--rw trunk-ctag-id   dot1q-vlan-type
+--rw remove [trunk-vlan-id trunk-ctag-id]
+--rw trunk-vlan-id    non-dot1q-vlan-type
+--rw trunk-ctag-id   dot1q-vlan-type
+--rw trunk-vlan-classification
|   +--rw allowed
|       +--rw vlan
|           +--rw add [trunk-vlan-id]
|               +--rw trunk-vlan-id    non-dot1q-vlan-type
|               +--rw trunk-ctag-range? ui32-ctag-range
|           +--rw remove [trunk-vlan-id]
|               +--rw trunk-vlan-id    non-dot1q-vlan-type
|               +--rw trunk-ctag-range? ui32-ctag-range
+--rw default-vlan-config
|   +--rw default-transparent-vlan? non-dot1q-vlan-type
+--rw tag?
|   +--rw native-vlan?    empty
+--rw native-vlan-classification
+--rw native-vlan-id?    native-vlan-type
+--rw native-vlan-ctag-id? dot1q-vlan-type
+--rw private-vlan
+--rw trunk
|   +--rw native
|       +--rw pvlanNativevlan?    vlan-type
|       +--rw pvlan-native-vlan-ctag-id? dot1q-vlan-type
+--rw allowed
+--rw vlan
+--rw pvlan_all?    empty
+--rw pvlan_none?  empty
+--rw pvlan_add?   ui32-vlan-range
+--rw pvlan_except? ui32-vlan-range
+--rw pvlan_remove? ui32-vlan-range
+--rw host-association
|   +--rw host-pri-pvlan?  vlan-type
|   +--rw host-sec-pvlan?  vlan-type
+--rw association
|   +--rw trunk [trunk-pri-pvlan trunk-sec-pvlan]
|       +--rw trunk-pri-pvlan  vlan-type
|       +--rw trunk-sec-pvlan  vlan-type
+--rw mapping [promis-pri-pvlan]
+--rw promis-pri-pvlan    vlan-type
+--rw oper?              secVlan-opp-type
+--rw promis-sec-pvlan-range? ui32-range-8091

```

```

| | | +--rw access-mac-rspan-vlan-classification
| | | | +--rw access
| | | | | +--rw vlan [access-vlan-id access-mac-address]
| | | | | +--rw access-vlan-id          vlan-type
| | | | | +--rw access-mac-address      mac-address-type
| | | +--rw access-mac-group-rspan-vlan-classification
| | | | +--rw access
| | | | | +--rw vlan [access-vlan-id access-mac-group]
| | | | | +--rw access-vlan-id          vlan-type
| | | | | +--rw access-mac-group      mac-group-id-type
| | +--rw ip
| | +--rw vrf
| | | +--rw forwarding?   common-def:vrf-name
| | +--rw ipv6
| | | +--rw ra-guard?     empty
| | +--rw edge-loop-detection
| | | +--rw eldprio?     uint32
| | | +--rw eldvlan?    ui32-eldvlan-range

```

interface/hundredgigabitethernet:

```

module: brocade-interface
+--rw interface
| +--rw hundredgigabitethernet [name]
| | +--rw name                interface-type
| | +--rw cee?                common-def:name-string32
| | +--ro ifindex?           uint64
| | +--rw description?       string
| | +--rw shutdown?          empty
| | +--rw channel-group
| | | +--rw port-int?         portchannel-type
| | | +--rw mode?            po-mode
| | | +--rw type?            po-type
| | +--rw mtu?                mtu-type
| | +--rw switchport-basic
| | | +--rw basic?           empty
| | +--rw switchport
| | | +--rw port-security?
| | | | +--rw port-sec-max?           uint32
| | | | +--rw port-sec-violation?     port-sec-violation
| | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | +--rw mac-address          mac-address-type
| | | | | +--rw port-sec-vlan        vlan-type
| | | | +--rw sticky?
| | | | | +--rw port-secutiry-mac-address [mac-address port-sec-vlan]
| | | | | +--rw mac-address          mac-address-type
| | | | | +--rw port-sec-vlan        vlan-type
| | | | +--rw allowed-ouis [oui]
| | | | | +--rw oui                oui-type
| | | | +--rw shutdown-time?       uint32
| | | +--rw mode
| | | | +--rw vlan-mode?           12-mode-type
| | | | +--rw private-vlan
| | | | | +--rw private-vlan-trunk
| | | | | | +--rw trunk-basic?       empty
| | | | | | +--rw trunk-promiscuous? empty
| | | | | | +--rw trunk-host?       empty
| | | | | +--rw promiscuous?       empty
| | | | | +--rw host?              empty
| | | +--rw access

```

```

+--rw accessvlan?      vlan-type
+--rw rspan-access
|   +--rw rspan-access-vlan?  vlan-type
+--rw access-mac-vlan-classification
|   +--rw access
|   |   +--rw vlan [access-vlan-id access-mac-address]
|   |   |   +--rw access-vlan-id      vlan-type
|   |   |   +--rw access-mac-address  mac-address-type
+--rw trunk-private-vlan-classification
|   +--rw private-vlan
|   |   +--rw trunk
|   |   |   +--rw allowed
|   |   |   |   +--rw vlan
|   |   |   |   |   +--rw add [trunk-vlan-id trunk-ctag-id]
|   |   |   |   |   |   +--rw trunk-vlan-id      non-dot1q-vlan-type
|   |   |   |   |   |   +--rw trunk-ctag-id      dot1q-vlan-type
|   |   |   |   |   +--rw remove [trunk-vlan-id trunk-ctag-id]
|   |   |   |   |   |   +--rw trunk-vlan-id      non-dot1q-vlan-type
|   |   |   |   |   |   +--rw trunk-ctag-id      dot1q-vlan-type
+--rw access-mac-group-vlan-classification
|   +--rw access
|   |   +--rw vlan [access-vlan-id access-mac-group]
|   |   |   +--rw access-vlan-id      vlan-type
|   |   |   +--rw access-mac-group    mac-group-id-type
+--rw trunk
|   +--rw allowed
|   |   +--rw vlan
|   |   |   +--rw all?      empty
|   |   |   +--rw none?    empty
|   |   |   +--rw add?     ui32-vlan-range
|   |   |   +--rw except?  ui32-vlan-range
|   |   |   +--rw remove?  ui32-vlan-range
|   |   x--rw vlanoper
|   |   |   +--rw vlan
|   |   |   |   +--rw add?     ui32-vlan-range
|   |   |   |   +--rw remove?  ui32-vlan-range
+--rw rspan-vlan
|   +--rw add-rspan-trunk-vlan?  ui32-vlan-range
|   +--rw remove-rspan-trunk-vlan?  ui32-vlan-range
+--rw trunk-rspan-vlan-classification
|   +--rw rspan-vlan
|   |   +--rw add [trunk-vlan-id trunk-ctag-id]
|   |   |   +--rw trunk-vlan-id      non-dot1q-vlan-type
|   |   |   +--rw trunk-ctag-id      dot1q-vlan-type
|   |   +--rw remove [trunk-vlan-id trunk-ctag-id]
|   |   |   +--rw trunk-vlan-id      non-dot1q-vlan-type
|   |   |   +--rw trunk-ctag-id      dot1q-vlan-type
+--rw trunk-vlan-classification
|   +--rw allowed
|   |   +--rw vlan
|   |   |   +--rw add [trunk-vlan-id]
|   |   |   |   +--rw trunk-vlan-id      non-dot1q-vlan-type
|   |   |   |   +--rw trunk-ctag-range?  ui32-ctag-range
|   |   |   +--rw remove [trunk-vlan-id]
|   |   |   |   +--rw trunk-vlan-id      non-dot1q-vlan-type
|   |   |   |   +--rw trunk-ctag-range?  ui32-ctag-range
+--rw default-vlan-config
|   +--rw default-transparent-vlan?  non-dot1q-vlan-type
+--rw tag?
|   +--rw native-vlan?  empty

```

```

| | | | +--rw native-vlan-classification
| | | | | +--rw native-vlan-id?      native-vlan-type
| | | | | +--rw native-vlan-ctag-id?  dot1q-vlan-type
+--rw private-vlan
| | | | +--rw trunk
| | | | | +--rw native
| | | | | | +--rw pvlanNativevlan?      vlan-type
| | | | | | +--rw pvlan-native-vlan-ctag-id?  dot1q-vlan-type
| | | | | +--rw allowed
| | | | | | +--rw vlan
| | | | | | | +--rw pvlan_all?      empty
| | | | | | | +--rw pvlan_none?    empty
| | | | | | | +--rw pvlan_add?      ui32-vlan-range
| | | | | | | +--rw pvlan_except?   ui32-vlan-range
| | | | | | | +--rw pvlan_remove?  ui32-vlan-range
+--rw host-association
| | | | | +--rw host-pri-pvlan?  vlan-type
| | | | | +--rw host-sec-pvlan?  vlan-type
+--rw association
| | | | | +--rw trunk [trunk-pri-pvlan trunk-sec-pvlan]
| | | | | | +--rw trunk-pri-pvlan  vlan-type
| | | | | | +--rw trunk-sec-pvlan  vlan-type
+--rw mapping [promis-pri-pvlan]
| | | | | +--rw promis-pri-pvlan  vlan-type
| | | | | +--rw oper?              secVlan-opp-type
| | | | | +--rw promis-sec-pvlan-range?  ui32-range-8091
+--rw access-mac-rspan-vlan-classification
| | | | | +--rw access
| | | | | | +--rw vlan [access-vlan-id access-mac-address]
| | | | | | | +--rw access-vlan-id      vlan-type
| | | | | | | +--rw access-mac-address  mac-address-type
+--rw access-mac-group-rspan-vlan-classification
| | | | | +--rw access
| | | | | | +--rw vlan [access-vlan-id access-mac-group]
| | | | | | | +--rw access-vlan-id      vlan-type
| | | | | | | +--rw access-mac-group  mac-group-id-type
+--rw ip
+--rw vrf
| | | | | +--rw forwarding?  common-def:vrf-name
+--rw ipv6
| | | | | +--rw ra-guard?  empty
+--rw edge-loop-detection
| | | | | +--rw eldprio?  uint32
+--rw eldvlan?  ui32-eldvlan-range

```

interface-vlan:

module: brocade-interface

```

+--rw interface-vlan
| | | | +--rw interface
| | | | | +--rw vlan [name]
| | | | | | +--rw name          vlan-type
| | | | | | +--rw transport-service?  uint16
| | | | | | +--ro ifindex?          uint64
| | | | | | +--rw description?      string
+--rw private-vlan
| | | | | +--rw pvlan-type-leaf?  pvlan-type
| | | | | +--rw association
| | | | | | +--rw sec-assoc-add?      ui32-range-8091

```

```

|   |   |   +--rw sec-assoc-remove?   ui32-range-8091
|   |   |   +--rw ip
|   |   +--rw ve [name]
|   |       +--rw name   ve-type
|   |       +--rw ip

```

protocol:

```

module: brocade-interface
  +--rw protocol

```

reserved-vlan:

```

module: brocade-interface
  +--rw reserved-vlan
    +--rw reserved-vlan-start?   uint32
    +--rw reserved-vlan-end?     uint32

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw rbridge-id
      +--rw brocade-interface:interface
        | +--rw brocade-interface:ve [name]
        | | +--rw brocade-interface:name           ve-type

```

RPCs None

Actions None

brocade-interface-ext

Description	Provides a data model extension to the brocade-interface module for defining RPCs to retrieve interface-related operational data in the managed device.
Top-level containers	None
External augmentations	None
RPCs	Custom RPCs defined in this module follow.

```

+---x get-vlan-brief
  | +--ro input
  | | +--ro (request-type)?
  | | | +--:(get-request)
  | | | | +--ro vlan-id?          interface:vlan-type
  | | | +--:(get-next-request)
  | | | +--ro last-rcvd-vlan-id?  interface:vlan-type
  | +--ro output
  | +--ro vlan [vlan-id]
  | | +--ro vlan-id          interface:vlan-type
  | | +--ro vlan-type?      enumeration
  | | +--ro vlan-name?      string
  | | +--ro vlan-state?     enumeration
  | | +--ro interface [interface-type interface-name]
  | | | +--ro interface-type  enumeration
  | | | +--ro interface-name  union
  | | | +--ro tag?            enumeration
  | | | +--ro classification [classification-type classification-value]
  | | | | +--ro classification-type  enumeration
  | | | | +--ro classification-value  string
  | | +--ro last-vlan-id?  interface:vlan-type
  | | +--ro has-more?      boolean
+---x get-interface-switchport
  | +--ro output
  | +--ro switchport [interface-type interface-name]
  | | +--ro interface-type  enumeration
  | | +--ro interface-name  union
  | | +--ro mode?           interface:switchport-mode-type
  | | +--ro fcoe-port-enabled?  boolean
  | | +--ro ingress-filter-enabled?  boolean
  | | +--ro acceptable-frame-type?  enumeration
  | | +--ro default-vlan?          interface:vlan-type
  | | +--ro active-vlans
  | | | +--ro vlanid*  interface:vlan-type
  | | +--ro inactive-vlans
  | | | +--ro vlanid*  interface:vlan-type
+---x get-ip-interface
  | +--ro input
  | | +--ro (request-type)?
  | | | +--:(get-request)
  | | | | +--ro interface-type?  enumeration
  | | | | +--ro interface-name?  union
  | | | | +--ro rbridge-id?      uint32
  | +--ro output
  | +--ro interface [interface-type interface-name]

```

```

| | +--ro interface-type          enumeration
| | +--ro interface-name        union
| | +--ro if-name?             string
| | +--ro ip-address [ipv4]
| | | +--ro ipv4                string
| | | +--ro ipv4-type?         enumeration
| | | +--ro broadcast?         string
| | | +--ro ip-mtu?            interface:mtu-type
| | +--ro if-state?            enumeration
| | +--ro line-protocol-state? enumeration
| | +--ro proxy-arp?           string
| | +--ro vrf?                  string
| +--ro has-more?              boolean
+---x get-interface-detail
  +--ro input
  | +--ro (request-type)?
  | | +--:(get-request)
  | | | +--ro interface-type?    enumeration
  | | | +--ro interface-name?    union
  | | +--:(get-next-request)
  | | | +--ro last-rcvd-interface
  | | | | +--ro interface-type?  enumeration
  | | | | +--ro interface-name?  union
  +--ro output
  +--ro interface [interface-type interface-name]
  | +--ro interface-type          enumeration
  | +--ro interface-name        union
  | +--ro ifindex?              uint64
  | +--ro mtu?                  interface:mtu-type
  | +--ro ip-mtu?               interface:mtu-type
  | +--ro if-name?              string
  | +--ro if-state?             enumeration
  | +--ro line-protocol-state?  enumeration
  | +--ro line-protocol-state-info? string
  | +--ro line-protocol-exception-info? string
  | +--ro hardware-type?        enumeration
  | +--ro logical-hardware-address? yang:mac-address
  | +--ro current-hardware-address? yang:mac-address
  | +--ro media-type?           enumeration
  | +--ro wavelength?           uint32
  | +--ro if-description?       string
  | +--ro actual-line-speed?     string
  | +--ro configured-line-speed? line-speed
  | +--ro line-duplex-state?    enumeration
  | +--ro flow-control?         bits
  | +--ro queuing-strategy?     enumeration
  | +--ro port-role?            enumeration
  | +--ro port-mode?            enumeration
  +--ro has-more?              boolean
+---x get-media-detail
  +--ro input
  | +--ro interface-type?        enumeration
  | +--ro interface-name?        union
  +--ro output
  +--ro interface [interface-type interface-name]
  | +--ro interface-type          enumeration
  | +--ro interface-name        union
  | +--ro (interface-identifier)?
  | | +--:(sfp)
  | | | +--ro sfp

```

```

|         +--ro speed?                line-speed
|         +--ro connector?            enumeration
|         +--ro encoding?             enumeration
|         +--ro vendor-name?          string
|         +--ro vendor-oui?           string
|         +--ro vendor-pn?            string
|         +--ro vendor-rev?           string
|         +--ro distance?             enumeration
|         +--ro media-form-factor?    enumeration
|         +--ro wavelength?           string
|         +--ro serial-no?            string
|         +--ro date-code?            string
|         +--ro temperature?          uint32
|         +--ro voltage?              decimal64
|         +--ro current?              decimal64
|         +--ro tx-power?             decimal64
|         +--ro rx-power?            decimal64
+---:(on-board)
|   +--ro on-board
|     +--ro speed?                line-speed
|     +--ro connector?            enumeration
|     +--ro encoding?             enumeration
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
+---:(gbic)
|   +--ro gbc
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
+---:(xfp)
|   +--ro xfp
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
+---:(xff)
|   +--ro xff
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
+---:(xfpe)
|   +--ro xfpe
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
+---:(unknown)
|   +--ro unknown
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
+---:(qsfp)
|   +--ro qsfp
|     +--ro speed?                line-speed
|     +--ro connector?            enumeration

```



```

|         +--ro encoding?           enumeration
|         +--ro vendor-name?       string
|         +--ro vendor-oui?        string
|         +--ro vendor-pn?         string
|         +--ro vendor-rev?        string
|         +--ro distance?          enumeration
|         +--ro media-form-factor? enumeration
|         +--ro wavelength?        string
|         +--ro serial-no?         string
|         +--ro date-code?         string
|         +--ro temperature?       uint32
|         +--ro voltage?           decimal64
|         +--ro current?           decimal64
|         +--ro tx-power?          decimal64
|         +--ro rx-power?          decimal64
+---: (qsfp)
|   +--ro qsfp
|     +--ro speed?                 line-speed
|     +--ro connector?            enumeration
|     +--ro encoding?             enumeration
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
|     +--ro distance?             enumeration
|     +--ro media-form-factor?    enumeration
|     +--ro wavelength?           string
|     +--ro serial-no?            string
|     +--ro date-code?            string
|     +--ro temperature?          uint32
|     +--ro voltage?              decimal64
|     +--ro current?              decimal64
|     +--ro tx-power?             decimal64
|     +--ro rx-power?            decimal64
+---: (cfp)
|   +--ro cfp
|     +--ro speed?                 line-speed
|     +--ro connector?            enumeration
|     +--ro encoding?             enumeration
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string
|     +--ro vendor-pn?            string
|     +--ro vendor-rev?           string
|     +--ro distance?             enumeration
|     +--ro media-form-factor?    enumeration
|     +--ro wavelength?           string
|     +--ro serial-no?            string
|     +--ro date-code?            string
|     +--ro temperature?          uint32
|     +--ro voltage?              decimal64
|     +--ro current?              decimal64
|     +--ro tx-power?             decimal64
|     +--ro rx-power?            decimal64
+---: (cfp2)
|   +--ro cfp2
|     +--ro speed?                 line-speed
|     +--ro connector?            enumeration
|     +--ro encoding?             enumeration
|     +--ro vendor-name?          string
|     +--ro vendor-oui?           string

```

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```
++-ro vendor-pn?          string
++-ro vendor-rev?        string
++-ro distance?          enumeration
++-ro media-form-factor? enumeration
++-ro wavelength?        string
++-ro serial-no?         string
++-ro date-code?         string
++-ro temperature?       uint32
++-ro voltage?           decimal64
++-ro current?           decimal64
++-ro tx-power?          decimal64
++-ro rx-power?          decimal64
```

Actions None

brocade-intf-loopback

Description Provides a data model for managing the interface loopback feature.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-intf-loopback
  +--rw hide-intf-loopback-holder
  +--rw interface
    +--rw loopback [id]
      +--rw id          intf-loopback-port-type
      +--rw vrf
        | +--rw forwarding?  common-def:vrf-name
      +--rw intf-loopback
        | +--rw shutdown?   empty

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw brocade-interface:interface
    | +--rw brocade-interface:ve [name]
    | | +--rw brocade-interface:name          ve-type
    | +--rw intf-loopback:loopback [id]
    | +--rw intf-loopback:id          intf-loopback-port-type
    | +--rw intf-loopback:vrf
    | | +--rw intf-loopback:forwarding?  common-def:vrf-name
    | +--rw intf-loopback:intf-loopback
    | | +--rw intf-loopback:shutdown?  empty

```

RPCs None

Actions None

brocade-ip-access-list

Description Provides a data model for the configuration of IP access control lists (ACLs).

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-ip-access-list
  +--rw ip-acl
    +--rw ip
      +--rw access-list
        +--rw standard [name]
          +--rw name 13-acl-policy-name
          +--rw hide-ip-acl-std
            +--rw seq [seq-id]
              +--rw seq-id seq-id-std-ext
              +--rw action? enumeration
              +--rw src-host-any-sip union
              +--rw src-host-ip? sip
              +--rw src-mask? sip-mask
              +--rw count? empty
              +--rw log? empty
        +--rw extended [name]
          +--rw name 13-acl-policy-name
          +--rw hide-ip-acl-ext
            +--rw seq [seq-id]
              +--rw seq-id seq-id-std-ext
              +--rw action? enumeration
              +--rw protocol-type union
              +--rw src-host-any-sip union
              +--rw src-host-ip? sip
              +--rw src-mask? sip-mask
              +--rw sport? enumeration
              +--rw sport-number-eq-neq-tcp? union
              +--rw sport-number-lt-tcp? union
              +--rw sport-number-gt-tcp? union
              +--rw sport-number-eq-neq-udp? union
              +--rw sport-number-lt-udp? union
              +--rw sport-number-gt-udp? union
              +--rw sport-number-range-lower-tcp? union
              +--rw sport-number-range-lower-udp? union
              +--rw sport-number-range-higher-tcp? union
              +--rw sport-number-range-higher-udp? union
              +--rw dst-host-any-dip union
              +--rw dst-host-ip? dip
              +--rw dst-mask? dip-mask
              +--rw dport? enumeration
              +--rw dport-number-eq-neq-tcp? union
              +--rw dport-number-lt-tcp? union
              +--rw dport-number-gt-tcp? union
              +--rw dport-number-eq-neq-udp? union
              +--rw dport-number-lt-udp? union
              +--rw dport-number-gt-udp? union
              +--rw dport-number-range-lower-tcp? union
              +--rw dport-number-range-lower-udp? union
              +--rw dport-number-range-higher-tcp? union
              +--rw dport-number-range-higher-udp? union
              +--rw dscp? union
              +--rw urg? empty
              +--rw ack? empty

```

```

    +--rw push?                empty
    +--rw fin?                 empty
    +--rw rst?                 empty
    +--rw sync?                empty
    +--rw count?              empty
    +--rw log?                 empty

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   |   +--rw ip-access-list:ip-acl-interface
  |   |   |   +--rw ip-access-list:ip
  |   |   |   |   +--rw ip-access-list:access-group [ip-access-list ip-direction]
  |   |   |   |   |   +--rw ip-access-list:ip-access-list 13-acl-policy-name
  |   |   |   |   |   +--rw ip-access-list:ip-direction  enumeration

```

```

module: brocade-interface
  +--rw interface
  |   +--rw tengigabitethernet [name]
  |   |   +--rw ip-access-list:ip-acl-interface
  |   |   |   +--rw ip-access-list:ip
  |   |   |   |   +--rw ip-access-list:access-group [ip-access-list ip-direction]
  |   |   |   |   |   +--rw ip-access-list:ip-access-list 13-acl-policy-name
  |   |   |   |   |   +--rw ip-access-list:ip-direction  enumeration

```

```

module: brocade-interface
  +--rw interface
  |   +--rw fortygigabitethernet [name]
  |   |   +--rw ip-access-list:ip-acl-interface
  |   |   |   +--rw ip-access-list:ip
  |   |   |   |   +--rw ip-access-list:access-group [ip-access-list ip-direction]
  |   |   |   |   |   +--rw ip-access-list:ip-access-list 13-acl-policy-name
  |   |   |   |   |   +--rw ip-access-list:ip-direction  enumeration

```

```

module: brocade-interface
  +--rw interface
  |   +--rw hundredgigabitethernet[name]
  |   |   +--rw ip-access-list:ip-acl-interface
  |   |   |   +--rw ip-access-list:ip
  |   |   |   |   +--rw ip-access-list:access-group [ip-access-list ip-direction]
  |   |   |   |   |   +--rw ip-access-list:ip-access-list 13-acl-policy-name
  |   |   |   |   |   +--rw ip-access-list:ip-direction  enumeration

```

```

module: brocade-interface
  +--rw interface
  |   +--rw port-channel [name]
  |   |   +--rw ip-access-list:ip-acl-interface
  |   |   |   +--rw ip-access-list:ip
  |   |   |   |   +--rw ip-access-list:access-group [ip-access-list ip-direction]
  |   |   |   |   |   +--rw ip-access-list:ip-access-list 13-acl-policy-name
  |   |   |   |   |   +--rw ip-access-list:ip-direction  enumeration

```

```

module: brocade-interface
  +--rw interface
  |   +--rw management [name]
  |   |   +--rw ip
  |   |   |   +--rw ip-access-list:access-group
  |   |   |   |   +--rw ip-access-list:mgmt-ip-access-list? 13-acl-policy-name

```

2 brocade-ip-access-list

```
    | | | +--rw ip-access-list:mgmt-ip-direction? enumeration

module: brocade-interface
  +--rw interface-vlan
  | +--rw interface
  | | +--rw ve [name]
  | | | +--rw name ve-type
  | | | +--rw ip
  | | | +--rw ip-access-list:ip-acl-interface
  | | | | +--rw ip-access-list:ip
  | | | | | +--rw ip-access-list:access-group [ip-access-list ip-direction]
  | | | | | +--rw ip-access-list:ip-access-list l3-acl-policy-name
  | | | | | +--rw ip-access-list:ip-direction enumeration

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw brocade-interface:interface
  | +--rw brocade-interface:ve [name]
  | | +--rw ip-access-list:ip-acl-interface
  | | | +--rw ip-access-list:ip
  | | | | +--rw ip-access-list:access-group [ip-access-list ip-direction]
  | | | | +--rw ip-access-list:ip-access-list l3-acl-policy-name
  | | | | +--rw ip-access-list:ip-direction enumeration
```

RPCs None

Actions None

brocade-ip-administration

Description	Provides a data model for configuring the domain Name Server.
Top-level containers	None
External augmentations	<p>Nodes that augment other modules and their subtrees follow.</p> <pre> module: brocade-common-def +--rw ip +--rw ip-administration:dns +--rw ip-administration:dom-name +--rw ip-administration:domain-name? string +--rw ip-administration:name-server [name-server-ip] +--rw ip-administration:name-server-ip inet:ip-address </pre>
RPCs	None
Actions	None

brocade-ip-config

Description Provides a data model for managing Layer 3 interfaces. Using this module, you can apply primary and secondary IP addresses to a physical interface, port-channel, or VE interface.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
    +--rw gigabitethernet [name]
      | | +--rw ip
      | | | +--rw ip-config:ip-config
      | | | | +--rw ip-config:mtu? uint32
      | | | | +--rw ip-config:directed-broadcast? empty
      | | | | +--rw ip-config:proxy-arp? empty
      | | | | +--rw ip-config:arp-aging-timeout? uint32
      | | | | +--rw ip-config:address [address]
      | | | | | +--rw ip-config:address common-def:ipv4-prefix-mask
      | | | | | +--rw ip-config:secondary? empty
      | | | | | +--rw ip-config:ospf-passive? empty
      | | | | | +--rw ip-config:ospf-ignore? empty

module: brocade-interface
  +--rw interface
    +--rw tengigabitethernet [name]
      | | +--rw ip
      | | | +--rw ip-config:ip-config
      | | | | +--rw ip-config:mtu? uint32
      | | | | +--rw ip-config:directed-broadcast? empty
      | | | | +--rw ip-config:proxy-arp? empty
      | | | | +--rw ip-config:arp-aging-timeout? uint32
      | | | | +--rw ip-config:address [address]
      | | | | | +--rw ip-config:address common-def:ipv4-prefix-mask
      | | | | | +--rw ip-config:secondary? empty
      | | | | | +--rw ip-config:ospf-passive? empty
      | | | | | +--rw ip-config:ospf-ignore? empty

module: brocade-interface
  +--rw interface
    +--rw fortygigabitethernet [name]
      | | +--rw ip
      | | | +--rw ip-config:ip-config
      | | | | +--rw ip-config:mtu? uint32
      | | | | +--rw ip-config:directed-broadcast? empty
      | | | | +--rw ip-config:proxy-arp? empty
      | | | | +--rw ip-config:arp-aging-timeout? uint32
      | | | | +--rw ip-config:address [address]
      | | | | | +--rw ip-config:address common-def:ipv4-prefix-mask
      | | | | | +--rw ip-config:secondary? empty
      | | | | | +--rw ip-config:ospf-passive? empty
      | | | | | +--rw ip-config:ospf-ignore? empty

module: brocade-interface
  +--rw interface
    +--rw hundredgigabitethernet [name]

```



```

| | |--rw ip
| | | |--rw ip-config:ip-config
| | | | |--rw ip-config:mtu?      uint32
| | | | |--rw ip-config:directed-broadcast?  empty
| | | | |--rw ip-config:proxy-arp?    empty
| | | | |--rw ip-config:arp-aging-timeout?  uint32
| | | | |--rw ip-config:address [address]
| | | | | |--rw ip-config:address      common-def:ipv4-prefix-mask
| | | | | |--rw ip-config:secondary?    empty
| | | | | |--rw ip-config:ospf-passive?  empty
| | | | | |--rw ip-config:ospf-ignore?  empty

module: brocade-interface
+--rw interface
|   +--rw port-channel [name]
|   |   +--rw ip
|   |   |   +--rw ip-config:hide-ip-holder
|   |   |   |   +--rw ip-config:ip-config
|   |   |   |   |   +--rw ip-config:mtu?      uint32
|   |   |   |   |   +--rw ip-config:directed-broadcast?  empty
|   |   |   |   |   +--rw ip-config:proxy-arp?    empty
|   |   |   |   |   +--rw ip-config:arp-aging-timeout?  uint32
|   |   |   |   |   +--rw ip-config:address [address]
|   |   |   |   |   |   +--rw ip-config:address      common-def:ipv4-prefix-mask
|   |   |   |   |   |   +--rw ip-config:secondary?    empty

module: brocade-interface
+--rw interface-vlan
|   +--rw interface
|   |   +--rw ve [name]
|   |   |   +--rw name                        ve-type
|   |   |   +--rw ip
|   |   |   |   +--rw ip-config:ip-config
|   |   |   |   |   +--rw ip-config:mtu?      uint32
|   |   |   |   |   +--rw ip-config:directed-broadcast?  empty
|   |   |   |   |   +--rw ip-config:proxy-arp?    empty
|   |   |   |   |   +--rw ip-config:arp-aging-timeout?  uint32
|   |   |   |   |   +--rw ip-config:address [address]
|   |   |   |   |   |   +--rw ip-config:address      common-def:ipv4-prefix-mask
|   |   |   |   |   |   +--rw ip-config:secondary?    empty
|   |   |   |   |   |   +--rw ip-config:ospf-passive?  empty
|   |   |   |   |   |   +--rw ip-config:ospf-ignore?  empty

module: brocade-intf-loopback
+--rw hide-intf-loopback-holder
+--rw interface
|   +--rw loopback [id]
|   |   +--rw ip-config:ip
|   |   |   +--rw ip-config:ip-config
|   |   |   |   +--rw ip-config:address [address]
|   |   |   |   |   +--rw ip-config:address

intf-loopback:intf-loopback-ipv4addr-type

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
|   +--rw rbridge-id                        uint32
|   +--rw brocade-interface:interface
|   |   +--rw brocade-interface:ve [name]
|   |   |   +--rw ip-config:ip
|   |   |   |   +--rw ip-config:ip-config

```

2 brocade-ip-config

```
| | | | +--rw ip-config:mtu? uint32
| | | | +--rw ip-config:directed-broadcast? empty
| | | | +--rw ip-config:proxy-arp? empty
| | | | +--rw ip-config:arp-aging-timeout? uint32
| | | | +--rw ip-config:address [address]
| | | |   +--rw ip-config:address common-def:ipv4-prefix-mask
| | | |   +--rw ip-config:secondary? empty
| | | |   +--rw ip-config:ospf-passive? empty
| | | |   +--rw ip-config:ospf-ignore? empty
```

```
module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw rbridge-id uint32
  +--rw brocade-interface:interface
  | +--rw intf-loopback:loopback [id]
  |   +--rw ip-config:ip
  |     +--rw ip-config:ip-config
  |       +--rw ip-config:address [address]
  |         +--rw ip-config:address
intf-loopback:intf-loopback-ipv4addr-type
```

```
module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw brocade-interface:interface
  | +--rw brocade-interface:ve [name]
  | | +--rw ip-config:shutdown? empty
```

RPCs None

Actions None

brocade-ip-forward

Description Provides a data model for managing Classless Inter-Domain Routing (CIDR) multipath IP Routes. Multipath IP routes have the same network number but differing network masks.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw ipv6
  |   +--rw ip-forward:route [dest]
  |   |   +--rw ip-forward:dest          inet:ipv6-prefix
  |   |   +--rw (next)
  |   |   |   +--:(ipv6-hop)
  |   |   |   |   +--rw ip-forward:next-hop?  inet:ipv6-address
  |   +--rw ip-forward:route [dest]
  |   |   +--rw ip-forward:dest          inet:ipv6-prefix
  |   |   +--rw (next)
  |   |   |   +--:(ipv6-hop)
  |   |   |   |   +--rw ip-forward:next-hop?  inet:ipv6-address
  |
  module: brocade-common-def
    +--rw ipv6
    |   +--rw ip-forward:route [dest]
    |   |   +--rw ip-forward:dest          inet:ipv6-prefix
    |   |   +--rw (next)
    |   |   |   +--:(ipv6-hop)
    |   |   |   |   +--rw ip-forward:next-hop?  inet:ipv6-address
    |

```

RPCs None

Actions None

brocade-ip-policy

Description Provides a data model for managing IP route policies.

IP route policy controls how routes or IP subnets are transported from one subsystem to another subsystem. The IP route policy may perform “permit” or “deny” actions so that matched routes may be allowed or denied to the target subsystem accordingly. Additionally, an IP route policy may be used to modify the characteristics of a matched route and IP subnet pair.

This module models two types of IP route policies; prefix-lists and route-maps.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-ip-policy
  +--rw hide-routemap-holder
  |   +--rw route-map [name action-rm instance]
  |   |   +--rw name          common-def:name-string63
  |   |   +--rw action-rm    action-t
  |   |   +--rw instance     instance-id-t
  |   |   +--rw content
  |   |   |   +--rw match
  |   |   |   |   +--rw interface
  |   |   |   |   |   +--rw tengigabitethernet-rmm*   interface:interface-type
  |   |   |   |   |   +--rw gigabitethernet-rmm*     interface:interface-type
  |   |   |   |   |   +--rw fortygigabitethernet-rmm* interface:interface-type
  |   |   |   |   |   +--rw hundredgigabitethernet-rmm* interface:interface-type
  |   |   |   |   |   +--rw port-channel-rmm*        interface:channel-group-type
  |   |   |   |   |   +--rw vlan-rmm*                interface:vlan-type
  |   |   |   |   |   +--rw loopback*
  |   |   |   |   |
  |   |   |   |   +--rw loopback-intf:intf-loopback-port-type
  |   |   |   |   |   +--rw ve*                        interface:ve-type
  |   |   |   |   |   +--rw ip
  |   |   |   |   |   |   +--rw address
  |   |   |   |   |   |   |   +--rw prefix-list-rmm?   ip-prefix-name-t
  |   |   |   |   |   |   |   +--rw acl-rmm?          ip-access-list:l3-acl-policy-name
  |   |   |   |   |   |   +--rw next-hop
  |   |   |   |   |   |   |   +--rw prefix-list-rmm-n? ip-prefix-name-t
  |   |   |   |   |   |   +--rw route-source
  |   |   |   |   |   |   |   +--rw prefix-list-rmrs?  string
  |   |   |   |   |   +--rw metric
  |   |   |   |   |   |   +--rw metric-rmm?          metric-t
  |   |   |   |   |   +--rw route-type
  |   |   |   |   |   |   +--rw route-type-rmm?      match-route-type-t
  |   |   |   |   |   +--rw tag
  |   |   |   |   |   |   +--rw tag-rmm*            tag-t
  |   |   |   |   |   +--rw as-path
  |   |   |   |   |   |   +--rw as-path-access-list-name? string
  |   |   |   |   |   +--rw community
  |   |   |   |   |   |   +--rw community-access-list-name? match-community-expr-t
  |   |   |   |   |   +--rw next-hop
  |   |   |   |   |   |   +--rw next-hop-filter-val?  uint32
  |   |   |   |   |   +--rw protocol
  |   |   |   |   |   |   +--rw protocol-bgp?        empty
  |   |   |   |   |   |   +--rw bgp-route-type?     enumeration
  |   |   |   |   |   +--rw set
  |   |   |   |   |   |   +--rw ip
  |   |   |   |   |   |   |   +--rw dscp
  |   |   |   |   |   |   |   |   +--rw dscp-rms?    dscp-precedence
  |   |   |   |   |   |   |   +--rw interface
  
```

```

| | | +--rw null0?    empty
| | | +--rw next-hop
| | | | +--rw peer-address?    empty
| | | +--rw global
| | | | +--rw next-global-hop [next-hop]
| | | | | +--rw next-hop    inet:ipv4-address
| | | +--rw next-ip
| | | | +--rw next-hop [next-hop]
| | | | | +--rw next-hop    inet:ipv4-address
| | | +--rw next-vrf
| | | | +--rw next-vrf-list [vrf next-hop]
| | | | | +--rw vrf        string
| | | | | +--rw next-hop    inet:ipv4-address
+--rw community
| +--rw set-community-expr?    set-community-expr-t
+--rw metric
| +--rw delta-rms?    enumeration
| +--rw metric-rms?    metric-t
+--rw distance
| +--rw dist-rms?    distance-t
+--rw route-type
| +--rw route-type-rms?    set-route-type-t
+--rw tag
| +--rw tag-rms?    tag-t
+--rw weight
| +--rw weight-value?    uint32
+--rw as-path
| +--rw aspath-tag?    empty
| +--rw prepend?    string
+--rw automatic-tag
| +--rw tag-empty?    empty
+--rw comm-list
| +--rw comm-list-name?    ip-community-list-name-t
| +--rw match-comm-delete?    empty
+--rw dampening
| +--rw half-life?    uint32
| +--rw reuse?    uint32
| +--rw suppress?    uint32
| +--rw max-suppress-time?    uint32
+--rw local-preference
| +--rw local-preference-value?    uint32
+--rw origin
| +--rw origin-igp?    empty
| +--rw origin-incomplete?    empty
+--rw metric-type
| +--rw external?    empty
| +--rw internal?    empty
| +--rw type-1?    empty
| +--rw type-2?    empty
+--rw continue-holder
| +--rw continue?    empty
| +--rw continue-val?    uint32
+--rw hide-filter-change-update-delay-holder
| +--rw filter-change-update-delay [filter-delay-value]
| +--rw filter-delay-value    uint32

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]

```

```

+--rw ip
|   +--rw ip-policy:prefix-list [name seq-keyword instance]
|   |   +--rw ip-policy:name          ip-prefix-name-t
|   |   +--rw ip-policy:seq-keyword   enumeration
|   |   +--rw ip-policy:instance      instance-id-t
|   |   +--rw ip-policy:action-ipp?   action-t
|   |   +--rw ip-policy:prefix-ipp?   inet:ipv4-prefix
|   |   +--rw ip-policy:ge-ipp?       prefix-len-t
|   |   +--rw ip-policy:le-ipp?       prefix-len-t
|   +--rw ip-policy:as-path
|   |   +--rw ip-policy:access-list [name seq-keyword instance]
|   |   |   +--rw ip-policy:name          ip-as-path-name-t
|   |   |   +--rw ip-policy:seq-keyword   enumeration
|   |   |   +--rw ip-policy:instance      instance-id-t
|   |   |   +--rw ip-policy:ip-action?    action-t
|   |   |   +--rw ip-policy:ip-reg-expr?  ip-as-path-reg-expr-t
|   +--rw ip-policy:community-list
|   |   +--rw ip-policy:standard [name seq-keyword instance]
|   |   |   +--rw ip-policy:name          ip-community-list-name-t
|   |   |   +--rw ip-policy:seq-keyword   enumeration
|   |   |   +--rw ip-policy:instance      instance-id-t
|   |   |   +--rw ip-policy:ip-action?    action-t
|   |   |   +--rw ip-policy:std-community-expr?  ip-std-community-expr-t
|   |   +--rw ip-policy:extended [name seq-keyword instance]
|   |   |   +--rw ip-policy:name          ip-community-list-name-t
|   |   |   +--rw ip-policy:seq-keyword   enumeration
|   |   |   +--rw ip-policy:instance      instance-id-t
|   |   |   +--rw ip-policy:ip-action?    action-t
|   |   |   +--rw ip-policy:ip-community-reg-expr?  ip-community-reg-expr-t
|
+--rw ip-policy:hide-prefix-holder
|   +--rw ip-policy:prefix-list [name seq-keyword instance]
|   |   +--rw ip-policy:name          ip-prefix-name-t
|   |   +--rw ip-policy:seq-keyword   enumeration
|   |   +--rw ip-policy:instance      instance-id-t
|   |   +--rw ip-policy:action-ipp?   action-t
|   |   +--rw ip-policy:prefix-ipp?   inet:ipv4-prefix
|   |   +--rw ip-policy:ge-ipp?       prefix-len-t
|   |   +--rw ip-policy:le-ipp?       prefix-len-t
|   +--rw ip-policy:hide-as-path-holder
|   |   +--rw ip-policy:as-path
|   |   |   +--rw ip-policy:access-list [name seq-keyword instance]
|   |   |   |   +--rw ip-policy:name          ip-as-path-name-t
|   |   |   |   +--rw ip-policy:seq-keyword   enumeration
|   |   |   |   +--rw ip-policy:instance      instance-id-t
|   |   |   |   +--rw ip-policy:ip-action?    action-t
|   |   |   |   +--rw ip-policy:ip-reg-expr?  ip-as-path-reg-expr-t
|   |   +--rw ip-policy:hide-community-list-holder
|   |   |   +--rw ip-policy:community-list
|   |   |   |   +--rw ip-policy:standard [name seq-keyword instance]
|   |   |   |   |   +--rw ip-policy:name          ip-community-list-name-t
|   |   |   |   |   +--rw ip-policy:seq-keyword   enumeration
|   |   |   |   |   +--rw ip-policy:instance      instance-id-t
|   |   |   |   |   +--rw ip-policy:ip-action?    action-t
|   |   |   |   |   +--rw ip-policy:std-community-expr?  ip-std-community-expr-t
|   |   |   +--rw ip-policy:extended [name seq-keyword instance]
|   |   |   |   +--rw ip-policy:name          ip-community-list-name-t
|   |   |   |   +--rw ip-policy:seq-keyword   enumeration

```

```

| |      +--rw ip-policy:instance          instance-id-t
| |      +--rw ip-policy:ip-action?       action-t
| |      +--rw ip-policy:ip-community-reg-expr? ip-community-reg-expr-t

```

```

module: brocade-interface
+--rw interface
|   +--rw gigabitethernet [name]
|   |   +--rw ip-policy:ip-pbr-interface
|   |   |   +--rw ip-policy:ip
|   |   |   +--rw ip-policy:policy
|   |   |   +--rw ip-policy:route-map
|   |   |   +--rw ip-policy:route-map-name?  common-def:name-string63

```

```

module: brocade-interface
+--rw interface
|   +--rw tengigabitethernet [name]
|   |   +--rw ip-policy:ip-pbr-interface
|   |   |   +--rw ip-policy:ip
|   |   |   +--rw ip-policy:policy
|   |   |   +--rw ip-policy:route-map
|   |   |   +--rw ip-policy:route-map-name?  common-def:name-string63

```

```

module: brocade-interface
+--rw interface
|   +--rw fortygigabitethernet [name]
|   |   +--rw ip-policy:ip-pbr-interface
|   |   |   +--rw ip-policy:ip
|   |   |   +--rw ip-policy:policy
|   |   |   +--rw ip-policy:route-map
|   |   |   +--rw ip-policy:route-map-name?  common-def:name-string63

```

```

module: brocade-interface
+--rw interface
|   +--rw hundredgigabitethernet [name]
|   |   +--rw ip-policy:ip-pbr-interface
|   |   |   +--rw ip-policy:ip
|   |   |   +--rw ip-policy:policy
|   |   |   +--rw ip-policy:route-map
|   |   |   +--rw ip-policy:route-map-name?  common-def:name-string63

```

```

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
+--rw brocade-interface:interface
|   +--rw brocade-interface:ve [name]
|   |   +--rw ip-policy:ip-pbr-interface
|   |   |   +--rw ip-policy:ip
|   |   |   +--rw ip-policy:policy
|   |   |   +--rw ip-policy:route-map
|   |   |   +--rw ip-policy:route-map-name?  common-def:name-string63

```

RPCs None

Actions None

brocade-ipv6-access-list

Description Provides a data model for the configuration of IPv6 access control lists (ACLs) and for retrieval of ACL operational data through custom RPCs.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-ipv6-access-list
  +--rw ipv6-acl
    +--rw ipv6
      +--rw access-list
        +--rw standard [name]
          | +--rw name      ipv6-l3-acl-policy-name
          | +--rw seq [seq-id]
          | | +--rw seq-id      ip-access-list:seq-id-std-ext
          | | +--rw action      enumeration
          | | +--rw src-host-any-sip union
          | | +--rw src-host-ip? sip
          | | +--rw count?      empty
          | | +--rw log?        empty
          +--rw extended [name]
            +--rw name      ipv6-l3-acl-policy-name
            +--rw seq [seq-id]
            +--rw seq-id
      ip-access-list:seq-id-std-ext
        +--rw action      enumeration
        +--rw protocol-type union
        +--rw src-host-any-sip union
        +--rw src-host-ip? sip
        +--rw sport?      enumeration
        +--rw sport-number-eq-neq-tcp? union
        +--rw sport-number-lt-tcp? union
        +--rw sport-number-gt-tcp? union
        +--rw sport-number-eq-neq-udp? union
        +--rw sport-number-lt-udp? union
        +--rw sport-number-gt-udp? union
        +--rw sport-number-range-lower-tcp? union
        +--rw sport-number-range-lower-udp? union
        +--rw sport-number-range-higher-tcp? union
        +--rw sport-number-range-higher-udp? union
        +--rw dst-host-any-dip union
        +--rw dst-host-ip? dip
        +--rw dport?      enumeration
        +--rw dport-number-eq-neq-tcp? union
        +--rw dport-number-lt-tcp? union
        +--rw dport-number-gt-tcp? union
        +--rw dport-number-eq-neq-udp? union
        +--rw dport-number-lt-udp? union
        +--rw dport-number-gt-udp? union
        +--rw dport-number-range-lower-tcp? union
        +--rw dport-number-range-lower-udp? union
        +--rw dport-number-range-higher-tcp? union
        +--rw dport-number-range-higher-udp? union
        +--rw dscp?      union
        +--rw urg?      empty
        +--rw ack?      empty
        +--rw push?     empty
        +--rw fin?      empty
        +--rw rst?      empty

```



```

    +--rw sync?          empty
    +--rw count?         empty
    +--rw log?           empty

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
    |   +--rw management [name]
    |   |   +--rw ipv6
    |   |   |   +--rw ipv6-access-list:access-group
    |   |   |   +--rw ipv6-access-list:mgmt-ipv6-access-list?
    |   |   |   ipv6-l3-acl-policy-name
    |   |   |   +--rw ipv6-access-list:mgmt-ip-direction?  enumeration

```

RPCs None

Actions None

brocade-lacp

Description Provides a data model to manage the Link Aggregation Control Protocol (LACP).

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-lacp
  +--rw lacp
    +--rw system-priority?  uint32
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-interface
  +--rw interface
    | +--rw gigabitethernet [name]
    | | +--rw lacp:lacp
    | | | +--rw lacp:timeout?      enumeration
    | | | +--rw lacp:std_port-priority?  uint32
    | | | +--rw lacp:default-up?      empty
```

```
module: brocade-interface
  +--rw interface
    | +--rw tengigabitethernet [name]
    | | +--rw lacp:lacp
    | | | +--rw lacp:timeout?      enumeration
    | | | +--rw lacp:std_port-priority?  uint32
    | | | +--rw lacp:default-up?      empty
```

```
module: brocade-interface
  +--rw interface
    | +--rw fortygigabitethernet [name]
    | | +--rw lacp:lacp
    | | | +--rw lacp:timeout?      enumeration
    | | | +--rw lacp:std_port-priority?  uint32
    | | | +--rw lacp:default-up?      empty
```

```
module: brocade-interface
  +--rw interface
    | +--rw hundredgigabitethernet [name]
    | | +--rw lacp:lacp
    | | | +--rw lacp:timeout?      enumeration
    | | | +--rw lacp:std_port-priority?  uint32
    | | | +--rw lacp:default-up?      empty
```

RPCs None

Actions None

brocade-lag

Description	Provides a data model to manage the link aggregation or IEEE 802.1AX-2008 feature.
Top-level containers	None
External augmentations	None
RPCs	Custom RPCs defined in this module follow.

```

+---x get-port-channel-detail
  | +--ro input
  | | +--ro last-aggregator-id?   interface:portchannel-type
  | +--ro output
  | | +--ro lacp
  | | | +--ro aggregator-id?       interface:portchannel-type
  | | | +--ro aggregator-type?     enumeration
  | | | +--ro isvlag?               boolean
  | | | +--ro aggregator-mode?     enumeration
  | | | +--ro admin-key?           lacp-key
  | | | +--ro oper-key?            lacp-key
  | | | +--ro actor-system-id?     yang:mac-address
  | | | +--ro partner-system-id?   yang:mac-address
  | | | +--ro system-priority?     uint32
  | | | +--ro partner-oper-priority? uint32
  | | | +--ro rx-link-count?       uint64
  | | | +--ro tx-link-count?       uint64
  | | | +--ro individual-agg?      uint32
  | | | +--ro ready-agg?           uint32
  | | | +--ro partner-oper-key?    lacp-key
  | | | +--ro aggr-member
  | | | | +--ro rbridge-id?         uint32
  | | | | +--ro interface-type?    enumeration
  | | | | +--ro interface-name?    union
  | | | | +--ro actor-port?        uint64
  | | | | +--ro sync?              uint64
  | | +--ro has-more?             boolean
+---x get-portchannel-info-by-intf
  | +--ro input
  | | +--ro interface-type?     enumeration
  | | +--ro interface-name?    union
  | +--ro output
  | | +--ro lacp
  | | | +--ro interface-type?     enumeration
  | | | +--ro interface-name?     union
  | | | +--ro actor-port?        uint64
  | | | +--ro admin-key?         lacp-key
  | | | +--ro oper-key?          lacp-key
  | | | +--ro actor-system-id?   yang:mac-address
  | | | +--ro partner-system-id? yang:mac-address
  | | | +--ro system-priority?   uint32
  | | | +--ro partner-oper-priority? uint32
  | | | +--ro actor-priority?    uint32
  | | | +--ro receive-machine-state? enumeration
  | | | +--ro periodic-transmission-machine-state? enumeration
  | | | +--ro mux-machine-state?  enumeration

```

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+--ro admin-state?	lacp-state
+--ro oper-state?	lacp-state
+--ro partner-oper-state?	lacp-state
+--ro partner-oper-port?	uint64
+--ro actor-chip-number?	uint32
+--ro actor-max-deskew?	uint32
+--ro partner-chip-number?	uint32
+--ro partner-max-deskew?	uint32
+--ro actor-brcd-state?	brcd-trunk-states
+--ro partner-brcd-state?	brcd-trunk-states

Actions None

brocade-license

Description Provides a data model to manage licenses in a VCS fabric. It provides custom actions to perform the following operations:

- Install or uninstall a license
- Return licence ID information
- Return license key values
- Return licensing information about dynamic Ports on Demand (PODs).

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-license
  +--rw license
  +--rw dpod
    +--rw port-id [port-id]
      +--rw port-id      interface:interface-type
      +--rw operation?  license-dpod-operation-type
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw brocade-license:license
```

RPCs None

Actions Proprietary actions defined in this module follow.

Install license keys.

```
module: brocade-license
  +--rw license
  |   +--ro add
  |   |   +--ro input
  |   |   |   +--ro (str-file)?
  |   |   |   |   +--:(licStr)
  |   |   |   |   |   +--ro licStr      string
  |   |   |   |   |   +--:(FTP-URL)
  |   |   |   |   |   |   +--ro FTP-URL  string
  |   |   |   |   |   |   +--:(SCP-URL)
  |   |   |   |   |   |   +--ro SCP-URL  string
  |   |   |   |   |   |   +--ro rbridge-id? common-def:rbridge-id-type
```

Uninstall license keys.

```
module: brocade-license
  +--rw license
  |   +--ro remove
  |   |   +--ro input
  |   |   |   +--ro licStr      common-def:feature-type
  |   |   |   +--ro rbridge-id? common-def:rbridge-id-type
```

Display license ID information.

```
module: brocade-common-def
  +--rw show
  |   +--rw brocade-license:license
  |   |   +--ro brocade-license:id
```

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```
    | | | | | +--ro brocade-license:input
    | | | | | | +--ro (single-or-all)?
    | | | | | | +---:(rbridge-id)
    | | | | | | | +--ro brocade-license:rbridge-id?
common-def:rbridge-id-all-type
    | | | | | | +---:(all)
    | | | | | | | +--ro brocade-license:all? empty
    | | | | | | +--ro brocade-license:output
    | | | | | | +--ro brocade-license:licenseid-list [licenseid-rbridge-id]
    | | | | | | +--ro brocade-license:licenseid-rbridge-id
common-def:rbridge-id-type
    | | | | | +--ro brocade-license:license-id? string
```

Display the license key information.

```
module: brocade-common-def
  +--rw show
  | +--rw brocade-license:enh-show-license-keys
  | | +--ro brocade-license:license
  | | | +--ro brocade-license:input
  | | | | +--ro (single-or-all)?
  | | | | +---:(rbridge-id)
  | | | | | +--ro brocade-license:rbridge-id?
common-def:rbridge-id-all-type
  | | | | | +---:(all)
  | | | | | | +--ro brocade-license:all? empty
  | | | | | +--ro brocade-license:output
  | | | | | +--ro brocade-license:license-list [license-rbridge-id]
  | | | | | +--ro brocade-license:license-rbridge-id
common-def:rbridge-id-type
  | | | | | +--ro brocade-license:license-details
  | | | | | | +--ro brocade-license:license-data? string
  | | | | | | +--ro brocade-license:license-expiry-date? string
  | | | | | | +--ro brocade-license:license-feature-name? string
  | | | | | | +--ro brocade-license:license-capacity? string
  | | | | | | +--ro brocade-license:license-consumed? string
  | | | | | | +--ro brocade-license:license-valid-state? string
```

Display DPOD (Dynamic ports on demand) information.

```
module: brocade-common-def
  +--rw show
  | +--rw brocade-license:enh-show-license-keys
  | | +--ro brocade-license:dpod
  | | | +--ro brocade-license:input
  | | | | +--ro (single-or-all)?
  | | | | +---:(rbridge-id)
  | | | | | +--ro brocade-license:rbridge-id?
common-def:rbridge-id-all-type
  | | | | | +---:(all)
  | | | | | | +--ro brocade-license:all? empty
  | | | | | +--ro brocade-license:output
  | | | | | +--ro brocade-license:showdpod-list [showdpod-rbridge-id]
  | | | | | +--ro brocade-license:showdpod-rbridge-id
common-def:rbridge-id-type
  | | | | | +--ro brocade-license:dpod-details
  | | | | | | +--ro brocade-license:dpod-ports? uint32
  | | | | | | +--ro brocade-license:dpod-licenses-installed? uint32
  | | | | | | +--ro brocade-license:num-ports-provisioned? uint32
  | | | | | | +--ro brocade-license:num-ports-reserved? uint32
  | | | | | | +--ro brocade-license:num-ports-license-available? uint32
```

brocade-linecard-management

Description Provides a data model for managing line cards. Using this module, you can configure a line card, power off a line card, or run show commands to display line card information.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-linecard-management
  +--rw linecardservice
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw linecard-management:global-lc-holder
      | +--rw linecard-management:linecard
      |   +--rw linecard-management:linecards [linecardName]
      |     +--rw linecard-management:linecardName   linecardid
      |     +--rw linecard-management:linecardType?  enumeration

module: brocade-common-def
  +--rw show
    | +--rw linecard-management:linecardinfo
    | +--rw linecard-management:sfminfo
    | +--rw linecard-management:mminfor
    | +--rw linecard-management:slotsinfor
```

RPCs None

Actions Proprietary actions defined in this module follow.

Display line card information:

```
module: brocade-common-def
  +--rw show
    | +--rw linecard-management:linecardinfo
    | | +--ro linecard-management:linecard
    | |   +--ro linecard-management:input
    | |   +--ro linecard-management:output
```

Display switch fabric module information:

```
module: brocade-common-def
  +--rw show
    | +--rw linecard-management:sfminfo
    | | +--ro linecard-management:sfm
    | |   +--ro linecard-management:input
    | |   +--ro linecard-management:output
```

Display management module information:

```
module: brocade-common-def
  +--rw show
    | +--rw linecard-management:mminfor
    | | +--ro linecard-management:mm
    | |   +--ro linecard-management:input
    | |   +--ro linecard-management:output
```

Display information about all slots:

```
module: brocade-common-def
```

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```
+--rw show
| +--rw linecard-management:slotsinfor
| | +--ro linecard-management:slots
| | +--ro linecard-management:input
| | +--ro linecard-management:output
```

Power off a line card:

```
module: brocade-linecard-management
+--rw linecardservice
+--ro power-off
| +--ro input
| +--ro (blade-type)?
| +--:(linecard)
| | +--ro linecard slotnum
| +--:(sfm)
| +--ro sfm sfmnum
```

Power off a line card:

```
module: brocade-linecard-management
+--rw linecardservice
+--ro power-on
+--ro input
+--ro (blade-type)?
+--:(linecard)
| +--ro linecard slotnum
+--:(sfm)
+--ro sfm sfmnum
```


brocade-lldp

Description Provides a data model to manage the Link Layer Discovery Protocol (LLDP). LLDP is a data-link layer protocol, operating above the MAC service layer, that performs basic neighbor discovery. The discovery process involves advertising the network device identity, capabilities, and interconnections on an IEEE 802 LAN network.

The protocol is formally referred to by the IEEE as Station and Media Access Control Connectivity Discovery specified in standards document 802.1AB.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   |   +--rw lldp:lldp
  |   |   |   +--rw lldp:cee
  |   |   |   |   +--rw lldp:lldp-cee-on-off?  enumeration
  |   |   |   |   +--rw lldp:dcbx-version?    enumeration
  |   |   |   |   +--rw lldp:disable?        empty
  |   |   |   |   +--rw lldp:iscsi-priority?  uint32
  |   |   |   |   +--rw lldp:profile?        string
  |   |   +--rw tengigabitethernet [name]
  |   |   |   +--rw lldp:lldp
  |   |   |   |   +--rw lldp:cee
  |   |   |   |   |   +--rw lldp:lldp-cee-on-off?  enumeration
  |   |   |   |   |   +--rw lldp:dcbx-version?    enumeration
  |   |   |   |   |   +--rw lldp:disable?        empty
  |   |   |   |   |   +--rw lldp:iscsi-priority?  uint32
  |   |   |   |   |   +--rw lldp:profile?        string
  |   |   +--rw fortygigabitethernet [name]
  |   |   |   +--rw lldp:lldp
  |   |   |   |   +--rw lldp:cee
  |   |   |   |   |   +--rw lldp:lldp-cee-on-off?  enumeration
  |   |   |   |   |   +--rw lldp:dcbx-version?    enumeration
  |   |   |   |   |   +--rw lldp:disable?        empty
  |   |   |   |   |   +--rw lldp:iscsi-priority?  uint32
  |   |   |   |   |   +--rw lldp:profile?        string
  |   |   +--rw hundredgigabitethernet [name]
  |   |   |   +--rw lldp:lldp
  |   |   |   |   +--rw lldp:cee
  |   |   |   |   |   +--rw lldp:lldp-cee-on-off?  enumeration
  |   |   |   |   |   +--rw lldp:dcbx-version?    enumeration
  |   |   |   |   |   +--rw lldp:disable?        empty
  |   |   |   |   |   +--rw lldp:iscsi-priority?  uint32
  |   |   |   |   |   +--rw lldp:profile?        string
  |   +--rw protocol
  |   |   +--rw lldp:lldp?
  |   |   |   +--rw lldp:description?          string
  |   |   |   +--rw lldp:hello?                uint32
  |   |   |   +--rw lldp:mode?                 enumeration
  |   |   |   +--rw lldp:multipplier?          uint32
  |   |   |   +--rw lldp:advertise
  |   |   |   |   +--rw lldp:dcbx-fcoe-app-tlv?  empty
  |   |   |   |   +--rw lldp:dcbx-fcoe-logical-link-tlv?  empty

```

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```

+--rw lldp:dcbx-iscsi-app-tlv?          empty
+--rw lldp:dcbx-tlv?                  empty
+--rw lldp:dot1-tlv?                  empty
+--rw lldp:dot3-tlv?                  empty
+--rw lldp:optional-tlv
  +--rw lldp:management-address?      empty
  +--rw lldp:port-description?        empty
  +--rw lldp:system-capabilities?     empty
  +--rw lldp:adv-tlv-system-description? empty
  +--rw lldp:adv-tlv-system-name?     empty
+--rw lldp:system-name?               string
+--rw lldp:system-description?        string
+--rw lldp:iscsi-priority?            uint32
+--rw lldp:disable?                   empty
+--rw lldp:profile [profile-name]
  +--rw lldp:profile-name             string
  +--rw lldp:description?             string
  +--rw lldp:hello?                   uint32
  +--rw lldp:mode?                    enumeration
  +--rw lldp:multiplier?              uint32
+--rw lldp:advertise
  +--rw lldp:dcbx-fcoe-app-tlv?       empty
  +--rw lldp:dcbx-fcoe-logical-link-tlv? empty
  +--rw lldp:dcbx-iscsi-app-tlv?     empty
  +--rw lldp:dcbx-tlv?                empty
  +--rw lldp:dot1-tlv?                empty
  +--rw lldp:dot3-tlv?                empty
  +--rw lldp:optional-tlv
    +--rw lldp:management-address?    empty
    +--rw lldp:port-description?      empty
    +--rw lldp:system-capabilities?   empty
    +--rw lldp:adv-tlv-system-description? empty
    +--rw lldp:adv-tlv-system-name?   empty

```

RPCs None

Actions None

brocade-logical-chassis

Description	Provides data model to configure logical-chassis principal-priority of an rbridge.
Top-level containers	None
External augmentations	Nodes that augment other modules and their subtrees follow. <pre>module: brocade-rbridge +--rw rbridge-id [rbridge-id] +--rw brocade-logical-chassis:logical-chassis +--rw brocade-logical-chassis:principal-priority? uint32</pre>
RPCs	None
Actions	None

brocade-mac-access-list

Description Provides a data model for configuring MAC access lists and for applying them to interfaces. A custom RPC enables retrieval of the configured ingress and egress policies per interface.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-mac-access-list
  +--rw mac
    +--rw access-list
      +--rw standard [name]
        |   +--rw name                               mac-acl-name
        |   +--rw hide-mac-acl-std
        |     +--rw seq [seq-id]
        |       +--rw seq-id                         uint64
        |       +--rw action?                        enumeration
        |       +--rw source                         union
        |       +--rw srchost?                       mac-address-type
        |       +--rw src-mac-addr-mask?            src-dst-mac-address-mask-type
        |       +--rw count?                         empty
        |       +--rw log?                           empty
      +--rw extended [name]
        +--rw name                               mac-acl-name
        +--rw hide-mac-acl-ext
          +--rw seq [seq-id]
            +--rw seq-id                         uint64
            +--rw action?                        enumeration
            +--rw source                         union
            +--rw srchost?                       mac-address-type
            +--rw src-mac-addr-mask?            src-dst-mac-address-mask-type
            +--rw dst                             union
            +--rw dsthost?                       mac-address-type
            +--rw dst-mac-addr-mask?            src-dst-mac-address-mask-type
            +--rw ethertype?                     union
            +--rw count?                         empty
            +--rw log?                           empty

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
    |   +--rw gigabitethernet [name]
    |     |   +--rw mac-access-list:mac
    |     |     +--rw mac-access-list:access-group [mac-access-list mac-direction]
    |     |     +--rw mac-access-list:mac-access-list   mac-acl-name
    |     |     +--rw mac-access-list:mac-direction   enumeration
    |   +--rw tengigabitethernet [name]
    |     |   +--rw mac-access-list:mac
    |     |     +--rw mac-access-list:access-group [mac-access-list mac-direction]
    |     |     +--rw mac-access-list:mac-access-list   mac-acl-name
    |     |     +--rw mac-access-list:mac-direction   enumeration
    |   +--rw fortygigabitethernet [name]
    |     |   +--rw mac-access-list:mac
    |     |     +--rw mac-access-list:access-group [mac-access-list mac-direction]
    |     |     +--rw mac-access-list:mac-access-list   mac-acl-name
    |     |     +--rw mac-access-list:mac-direction   enumeration
    |   +--rw hundredgigabitethernet [name] | | +--rw mac-access-list:mac
    |     |   +--rw mac-access-list:access-group [mac-access-list mac-direction]
    |     |   +--rw mac-access-list:mac-access-list   mac-acl-name

```

```

| | |      +--rw mac-access-list:mac-direction      enumeration
| +--rw port-channel [name]
| | +--rw mac-access-list:mac
| | |      +--rw mac-access-list:access-group [mac-access-list mac-direction]
| | |      +--rw mac-access-list:mac-access-list    mac-acl-name
| | |      +--rw mac-access-list:mac-direction      enumeration
+--rw interface-vlan
| +--rw interface
| | +--rw mac-access-list:mac
| | |      +--rw mac-access-list:access-group [mac-access-list mac-direction]
| | |      +--rw mac-access-list:mac-access-list    mac-acl-name
| | |      +--rw mac-access-list:mac-direction      enumeration

```

RPCs Custom RPCs defined in this module follow.

Return the ingress and egress policies for an interface:

```

+---x get-mac-acl-for-intf
  +--ro input
  | +--ro interface-type?  enumeration
  | +--ro interface-name?  union
  | +--ro direction?      enumeration
  +--ro output
  +--ro interface [interface-type interface-name]
    +--ro interface-type  enumeration
    +--ro interface-name  union
    +--ro ingress-policy
    | +--ro policy-name?  string
    +--ro egress-policy
    +--ro policy-name?   string

```

Actions None

brocade-mac-address-table

Description Provides a data model for configuring the MAC address table and returning information about the MAC address table through the get-mac-address-table custom RPC. Using this module, you can set the aging time, add static addresses to the MAC address table, or forward the MAC address.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-mac-address-table
  +--rw mac-address-table
  | +--rw static [mac-address forward interface-type interface-name vlan vlanid]
  | | +--rw mac-address      mac-access-list:mac-address-type
  | | +--rw forward          enumeration
  | | +--rw interface-type   enumeration
  | | +--rw interface-name   string
  | | +--rw vlan             enumeration
  | | +--rw vlanid           interface:vlan-type
  | +--rw aging-time?       uint32
  +--rw mac-group [mac-group-id]
  | +--rw mac-group-id      interface:mac-group-id-type
  | +--rw mac-group-entry [entry-address]
  | +--rw entry-address     interface:mac-address-type
```

External augmentations None

RPCs Custom RPCs defined in this module follow.

```
+---x get-mac-address-table
  +--ro input
  | +--ro (request-type)?
  | | +--ro mac-address?          yang:mac-address
  | | +--ro (get-next-request)
  | | +--ro last-mac-address-details
  | | | +--ro last-mac-address?   yang:mac-address
  | | | +--ro last-vlan-id?       interface:vlan-type
  | | | +--ro last-mac-type?      enumeration
  +--ro output
  | +--ro mac-address-table [vlanid mac-address]
  | | +--ro vlanid                interface:vlan-type
  | | +--ro mac-address            yang:mac-address
  | | +--ro mac-type?              enumeration
  | | +--ro mac-state?             enumeration
  | | +--ro forwarding-interface
  | | | +--ro interface-type?     enumeration
  | | | +--ro interface-name?     union
  +--ro has-more?                  boolean
```

Actions None

brocade-nameserver

Description Provides a data model to manage the Fibre Channel (FC) Name Server, which realizes the FC-GS-6 requirements.

This module provides the means for monitoring the operation of, and configuring some parameters of, one or more instances of the Fibre Channel Name Server functionality.

The Fibre Channel Name Server provides a way for N_Ports and NL_Ports to register and discover Fibre Channel attributes. Such attributes include names, addresses, types, features, and so on, at various protocol layers, including upper layer protocols specific to Fibre Channel, which are sometimes referred to as *FC-4s*.

Physically, Fibre Channel is an interconnection of multiple communication points, called N_Ports, interconnected either by a switching network, called a *fabric*, or by a point-to-point link. A Fibre Channel “node” consists of one or more N_Ports. A fabric may consist of multiple Interconnect Elements, some of which are switches. An N_Port connects to the fabric by way of a port on a switch called an F_Port. When multiple FC nodes are connected to a single port on a switch by way of an *Arbitrated Loop* topology, the switch port is called an FL_Port, and the nodes' ports are called NL_Ports. The term Nx_Port is used to refer to either an N_Port or an NL_Port.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw name-server:name-server
```

RPCs None

Actions Proprietary actions defined in this module follow.

Display detailed name server information.

```
module: brocade-common-def
  +--rw show
  |   +--rw name-server:name-server
  |   |   +--ro name-server:detail
  |   |   |   +--ro name-server:input
  |   |   |   |   +--ro name-server:rbridge-id?   common-def:rbridge-id-type
  |   |   |   |   +--ro name-server:output
  |   |   |   |   +--ro name-server:show-nameserver [nameserver-portid]
  |   |   |   |   +--ro name-server:nameserver-portid
  |   |   |   |   nameserver-portid-type
  |   |   |   |   +--ro name-server:nameserver-portname?
  |   |   |   |   common-def:wwn-type
  |   |   |   |   +--ro name-server:nameserver-nodename?
  |   |   |   |   common-def:wwn-type
  |   |   |   |   +--ro name-server:nameserver-scr?           uint32
  |   |   |   |   +--ro name-server:nameserver-fc4s?
  |   |   |   |   nameserver-fc4s-type
  |   |   |   |   +--ro name-server:nameserver-portsymb?
  |   |   |   |   nameserver-symbolic-name-type
  |   |   |   |   +--ro name-server:nameserver-nodesymb?
  |   |   |   |   nameserver-symbolic-name-type
```

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```
    | | |      +---ro name-server:nameserver-fabric-portname?
common-def:wnn-type
    | | |      +---ro name-server:nameserver-permanent-portname?
common-def:wnn-type
    | | |      +---ro name-server:nameserver-devicetype?
nameserver-devicetype-type
    | | |      +---ro name-server:nameserver-index?                uint32
    | | |      +---ro name-server:nameserver-porttype?
nameserver-porttype-type
    | | |      +---ro name-server:nameserver-cos?
nameserver-cos-type
    | | |      +---ro name-server:nameserver-sharearea?
nameserver-sharearea-type
    | | |      +---ro name-server:nameserver-redirect?
nameserver-redirect-type
    | | |      +---ro name-server:nameserver-xlatedomain?
nameserver-xlatedomain-type
    | | |      +---ro name-server:nameserver-connected-via-ag?
nameserver-connected-via-ag-type
    | | |      +---ro name-server:nameserver-ag-base-device?
nameserver-ag-base-device-type
    | | |      +---ro name-server:nameserver-real?
nameserver-real-type
    | | |      +---ro name-server:nameserver-cascaded?
nameserver-cascaded-type
```

Display brief name server information.

```
module: brocade-common-def
  +---rw show
  | +---rw name-server:name-server
  | | +---ro name-server:brief
  | | | +---ro name-server:input
  | | | +---ro name-server:rbridge-id?   common-def:rbridge-id-type
```

Display nodes matching a specified WWN or PID.

```
module: brocade-common-def
  +---rw show
  | +---rw name-server:name-server
  | | +---ro name-server:nodefind
  | | | +---ro name-server:input
  | | | +---ro (pid-or-wnn)?
  | | | +---:(wnn)
  | | | | +---ro name-server:wnn   common-def:wnn-type
  | | | +---:(pid)
  | | | +---ro name-server:pid   nameserver-fcid-hexstring-type
```

Display all nodes zoned with a device matching a specified WWN or PID.

```
module: brocade-common-def
  +---rw show
  | +---rw name-server:name-server
  | | +---ro name-server:zonemember
  | | | +---ro name-server:input
  | | | +---ro (pid-or-wnn)?
  | | | +---:(wnn)
  | | | | +---ro name-server:wnn   common-def:wnn-type
  | | | +---:(pid)
  | | | +---ro name-server:pid   nameserver-fcid-hexstring-type
```


brocade-netconf-ext

Description	Provides a data model to manage NETCONF. It provides an RPC to return client capabilities.
Top-level containers	None
External augmentations	None
RPCs	<p>Custom RPCs defined in this module follow.</p> <pre> +---x get-netconf-client-capabilities +--ro input +--ro session-id? uint32 +--ro output +--ro session +--ro session-id? uint32 +--ro user-name? string +--ro vendor? string +--ro product? string +--ro version? string +--ro identity? string +--ro af-type? enumeration +--ro host-ip-v6? inet:ipv6-address +--ro host-ip? inet:ipv4-address +--ro time? ietfyang:date-and-time </pre>
Actions	None

brocade-ntp

Description Provides a data model to configure Network Time Protocol (NTP) servers and monitor the active server.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-ntp
  +--rw ntp
    +--rw server [ip]
      | +--rw ip      inet:ip-address
      | +--rw key?   uint32
    +--rw authentication-key [keyid]
      +--rw keyid    uint32
      +--rw md5?    string
  
```

External augmentations None

RPCs Custom RPCs defined in this module follow.

Return address of the active NTP server:

```

+---x show-ntp
  +--ro input
    | +--ro rbridge-id?  common-def:rbridge-id-all-type
  +--ro output
    +--ro node-active-server
      +--ro rbridge-id-out?  common-def:rbridge-id-type
      +--ro (ip4-6-or-local)?
        +--:(ip4-6)
          | +--ro active-server?  inet:ip-address
          +--:(local)
            +--ro LOCL?          boolean
  
```

Actions None

brocade-ospf

Description Provides a data model to configure the Open Shortest Path First (OSPF) version 2 protocol. Using this module, you can configure the global OSPF parameters and per-interface parameters.

Top-level containers None

External augmentations

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw router
    | +--rw ospf:ospf [vrf]
    | | +--rw ospf:vrf string
    | | +--rw ospf:database-overflow-interval?
  common-def:time-interval-sec
    | +--rw ospf:default-information-originate?
    | | +--rw ospf:always? empty
    | | +--rw ospf:def-orig-metric? uint32
    | | +--rw ospf:def-orig-metric-type? metric-type
    | | +--rw ospf:def-orig-route-map? string
    | | +--rw ospf:default-passive-interface? empty
    | | +--rw ospf:default-metric? uint32
    | | +--rw ospf:external-lsdb-limit? uint32
    | | +--rw ospf:log
    | | | +--rw ospf:adjacency?
    | | | | +--rw ospf:dr-only? empty
    | | | +--rw ospf:log-all? empty
    | | | +--rw ospf:bad-packet?
    | | | | +--rw ospf:log-checksum? empty
    | | | +--rw ospf:log-database? empty
    | | | +--rw ospf:log-retransmit? empty
    | | +--rw ospf:ospf-metric-type? metric-type
    | | +--rw ospf:neighbor [neighbor-addr]
    | | | +--rw ospf:neighbor-addr ospf-ipv4-address
    | | +--rw ospf:nssa-translator?
    | | | +--rw ospf:nssa-translator-flag? empty
    | | +--rw ospf:redistribute
    | | | +--rw ospf:connected?
    | | | | +--rw ospf:connected-route-map? common-def:name-string63
    | | | +--rw ospf:static?
    | | | | +--rw ospf:static-route-map? common-def:name-string63
    | | | +--rw ospf:bgp?
    | | | | +--rw ospf:bgp-route-map? common-def:name-string63
    | | +--rw ospf:rfc1583-compatibility?
    | | | +--rw ospf:rfc1583-compatibility-flag? empty
    | | +--rw ospf:area [area-id]
    | | | +--rw ospf:area-id ospf-area-id
    | | | +--rw ospf:normal? empty
    | | | +--rw ospf:nssa
    | | | | +--rw ospf:metric
    | | | | | +--rw ospf:nssa-value? big-metric
    | | | | | +--rw ospf:no-summary1? empty
    | | | | | +--rw ospf:default-information-originate? empty
    | | +--rw ospf:range [range-address range-mask]
    | | | +--rw ospf:range-address inet:ipv4-address
    | | | +--rw ospf:range-mask inet:ipv4-address
    | | | +--rw ospf:range-effect? enumeration
    | | | +--rw ospf:range-cost? range-metric
  
```

```

+--rw ospf:stub
|   +--rw ospf:metric
|   |   +--rw ospf:stub-value?   big-metric
|   |   +--rw ospf:no-summary?   empty
+--rw ospf:virtual-link [virt-link-neighbor]
+--rw ospf:virt-link-neighbor   inet:ipv4-address
+--rw ospf:authentication-key
|   +--rw ospf:no-encrypt-auth-key-table
|   |   +--rw ospf:no-encrypt-auth-key?   ospf-auth-psswd-string
|   |   +--rw ospf:auth-key-table
|   |   |   +--rw ospf:encrypttype?   key-type
|   |   |   +--rw ospf:auth-key?     ospf-auth-psswd-string
+--rw ospf:dead-interval?       common-def:time-interval-sec
+--rw ospf:hello-interval?      common-def:time-interval-sec
+--rw ospf:retransmit-interval? common-def:time-interval-sec
+--rw ospf:transmit-delay?      common-def:time-interval-sec
+--rw ospf:md5-authentication
|   +--rw ospf:key-activation-wait-time?
common-def:time-interval-sec
|   +--rw ospf:no-encrypt-key-table
|   |   +--rw ospf:no-encrypt-key-id?   uint32
|   |   +--rw ospf:no-encrypt-key?     ospf-auth-psswd-string
+--rw ospf:key-table
|   +--rw ospf:key-id?               uint32
|   +--rw ospf:key?                  key-type
|   +--rw ospf:md5-authentication-key? ospf-auth-psswd-string
+--rw ospf:auto-cost
|   +--rw ospf:reference-bandwidth
|   |   +--rw ospf:ref-bandwidth?   band-width
|   |   +--rw ospf:use-active-ports? empty
+--rw ospf:distance [route-type]
|   +--rw ospf:route-type   route-type-enum
|   +--rw ospf:dist-value?  uint32
+--rw ospf:distribute-list
|   +--rw ospf:route-map
|   |   +--rw ospf:route-map?   common-def:name-string63
|   |   +--rw ospf:in?         empty
+--rw ospf:max-metric
|   +--rw ospf:router-lsa?
|   |   +--rw ospf:all-vrfs?   empty
|   |   +--rw ospf:all-lsas?  empty
|   |   +--rw ospf:external-lsa?
|   |   |   +--rw ospf:external-lsa-val?   uint32
+--rw ospf:summary-lsa?
|   |   +--rw ospf:summary-lsa-val?   uint32
+--rw ospf:link
|   +--rw ospf:all?           empty
|   +--rw ospf:ptp?          empty
|   +--rw ospf:stub?         empty
|   +--rw ospf:transit?     empty
+--rw ospf:on-startup
|   +--rw ospf:time?         uint32
|   +--rw ospf:wait-for-bgp? empty
|   +--rw ospf:all-lsas-onstartup? empty
+--rw ospf:external-lsa-onstartup?
|   +--rw ospf:external-lsa-val-onstartup?   uint32
+--rw ospf:summary-lsa-onstartup?
|   +--rw ospf:summary-lsa-val-onstartup?   uint32
+--rw ospf:link-onstartup
|   +--rw ospf:all-link-onstartup?   empty

```



```

| | | | | | | +---rw ospf:no-encrypt-key-id? uint32
| | | | | | | +---rw ospf:no-encrypt-key? ospf-auth-psswd-string
| | | | | | | +---rw ospf:key-table
| | | | | | | +---rw ospf:key-id? uint32
| | | | | | | +---rw ospf:key? key-type
| | | | | | | +---rw ospf:md5-authentication-key?
ospf-auth-psswd-string
| | | | | | | +---rw ospf:cost? uint32
| | | | | | | +---rw ospf:database-filter
| | | | | | | | +---rw ospf:all-out? empty
| | | | | | | | +---rw ospf:all-external? database-filter-options
| | | | | | | | +---rw ospf:all-summary-external? database-filter-options
| | | | | | | +---rw ospf:mtu-ignore? empty
| | | | | | | +---rw ospf:network? enumeration
| | | | | | | +---rw ospf:active? empty
| | | | | | | +---rw ospf:passive? empty
| | | | | | | +---rw ospf:priority? uint32

module: brocade-interface
+---rw interface-vlan
| +---rw interface
| | +---rw ve [name]
| | | +---rw ip
| | | | +---rw ospf:interface-vlan-ospf-conf
| | | | | +---rw ospf:ospf1
| | | | | | +---rw ospf:area? ospf-area-id
| | | | | | +---rw ospf:auth-change-wait-time?
common-def:time-interval-sec
| | | | | | | +---rw ospf:authentication-key
| | | | | | | | +---rw ospf:no-encrypt-auth-key-table
| | | | | | | | | +---rw ospf:no-encrypt-auth-key? ospf-auth-psswd-string
| | | | | | | | | +---rw ospf:auth-key-table
| | | | | | | | | | +---rw ospf:encrypttype? key-type
| | | | | | | | | | +---rw ospf:auth-key? ospf-auth-psswd-string
| | | | | | | | | +---rw ospf:dead-interval?
common-def:time-interval-sec
| | | | | | | +---rw ospf:hello-interval?
common-def:time-interval-sec
| | | | | | | +---rw ospf:retransmit-interval?
common-def:time-interval-sec
| | | | | | | +---rw ospf:transmit-delay?
common-def:time-interval-sec
| | | | | | | +---rw ospf:md5-authentication
| | | | | | | | +---rw ospf:key-activation-wait-time?
common-def:time-interval-sec
| | | | | | | | +---rw ospf:no-encrypt-key-table
| | | | | | | | | +---rw ospf:no-encrypt-key-id? uint32
| | | | | | | | | +---rw ospf:no-encrypt-key? ospf-auth-psswd-string
| | | | | | | | +---rw ospf:key-table
| | | | | | | | | +---rw ospf:key-id? uint32
| | | | | | | | | +---rw ospf:key? key-type
| | | | | | | | +---rw ospf:md5-authentication-key?
ospf-auth-psswd-string
| | | | | | | | +---rw ospf:cost? uint32
| | | | | | | | +---rw ospf:database-filter
| | | | | | | | | +---rw ospf:all-out? empty
| | | | | | | | | +---rw ospf:all-external? database-filter-options
| | | | | | | | | +---rw ospf:all-summary-external? database-filter-options
| | | | | | | | +---rw ospf:mtu-ignore? empty

```



```

    | | | | |
    | | | | | +-rw ospf:authentication-key
    | | | | | | +-rw ospf:no-encrypt-auth-key-table
    | | | | | | | +-rw ospf:no-encrypt-auth-key?   ospf-auth-psswd-string
    | | | | | | +-rw ospf:auth-key-table
    | | | | | | | +-rw ospf:encrypttype?       key-type
    | | | | | | | +-rw ospf:auth-key?         ospf-auth-psswd-string
    | | | | | +-rw ospf:dead-interval?         common-def:time-interval-sec
    | | | | | +-rw ospf:hello-interval?        common-def:time-interval-sec
    | | | | | +-rw ospf:retransmit-interval?    common-def:time-interval-sec
    | | | | | +-rw ospf:transmit-delay?        common-def:time-interval-sec
    | | | | | +-rw ospf:md5-authentication
    | | | | | | +-rw ospf:key-activation-wait-time?
common-def:time-interval-sec
    | | | | | | +-rw ospf:no-encrypt-key-table
    | | | | | | | +-rw ospf:no-encrypt-key-id?   uint32
    | | | | | | | +-rw ospf:no-encrypt-key?     ospf-auth-psswd-string
    | | | | | | +-rw ospf:key-table
    | | | | | | | +-rw ospf:key-id?             uint32
    | | | | | | | +-rw ospf:key?              key-type
    | | | | | | | +-rw ospf:md5-authentication-key? ospf-auth-psswd-string
    | | | | | +-rw ospf:cost?                   uint32
    | | | | | +-rw ospf:database-filter
    | | | | | | +-rw ospf:all-out?             empty
    | | | | | | +-rw ospf:all-external?        database-filter-options
    | | | | | | +-rw ospf:all-summary-external? database-filter-options
    | | | | | +-rw ospf:mtu-ignore?            empty
    | | | | | +-rw ospf:network?               enumeration
    | | | | | +-rw ospf:active?                empty
    | | | | | +-rw ospf:passive?              empty
    | | | | | +-rw ospf:priority?             uint32

module: brocade-interface
  +-rw interface
  | +-rw hundredgigabitethernet [name]
  | | +-rw ip
  | | | +-rw ospf:interface-fo-ospf-conf
  | | | | +-rw ospf:ospf1
  | | | | | +-rw ospf:area?                   ospf-area-id
  | | | | | +-rw ospf:auth-change-wait-time?   common-def:time-interval-sec
  | | | | | +-rw ospf:authentication-key
  | | | | | | +-rw ospf:no-encrypt-auth-key-table
  | | | | | | | +-rw ospf:no-encrypt-auth-key?   ospf-auth-psswd-string
  | | | | | | +-rw ospf:auth-key-table
  | | | | | | | +-rw ospf:encrypttype?       key-type
  | | | | | | | +-rw ospf:auth-key?         ospf-auth-psswd-string
  | | | | | +-rw ospf:dead-interval?         common-def:time-interval-sec
  | | | | | +-rw ospf:hello-interval?        common-def:time-interval-sec
  | | | | | +-rw ospf:retransmit-interval?    common-def:time-interval-sec
  | | | | | +-rw ospf:transmit-delay?        common-def:time-interval-sec
  | | | | | +-rw ospf:md5-authentication
  | | | | | | +-rw ospf:key-activation-wait-time?
common-def:time-interval-sec
  | | | | | | +-rw ospf:no-encrypt-key-table
  | | | | | | | +-rw ospf:no-encrypt-key-id?   uint32
  | | | | | | | +-rw ospf:no-encrypt-key?     ospf-auth-psswd-string
  | | | | | | +-rw ospf:key-table
  | | | | | | | +-rw ospf:key-id?             uint32
  | | | | | | | +-rw ospf:key?              key-type
  | | | | | | | +-rw ospf:md5-authentication-key? ospf-auth-psswd-string
  | | | | | +-rw ospf:cost?                   uint32

```



```

| | | | ---rw ospf:database-filter
| | | | | ---rw ospf:all-out? empty
| | | | | ---rw ospf:all-external? database-filter-options
| | | | | ---rw ospf:all-summary-external? database-filter-options
| | | | ---rw ospf:mtu-ignore? empty
| | | | ---rw ospf:network? enumeration
| | | | ---rw ospf:active? empty
| | | | ---rw ospf:passive? empty
| | | | ---rw ospf:priority? uint32

module: brocade-interface
---rw interface
| ---rw tengigabitethernet [name]
| | ---rw ip
| | | ---rw ospf:interface-te-ospf-conf
| | | | ---rw ospf:ospfl
| | | | | ---rw ospf:area? ospf-area-id
| | | | | ---rw ospf:auth-change-wait-time? common-def:time-interval-sec
| | | | | ---rw ospf:authentication-key
| | | | | | ---rw ospf:no-encrypt-auth-key-table
| | | | | | | ---rw ospf:no-encrypt-auth-key? ospf-auth-psswd-string
| | | | | | ---rw ospf:auth-key-table
| | | | | | | ---rw ospf:encrypttype? key-type
| | | | | | | ---rw ospf:auth-key? ospf-auth-psswd-string
| | | | | ---rw ospf:dead-interval? common-def:time-interval-sec
| | | | | ---rw ospf:hello-interval? common-def:time-interval-sec
| | | | | ---rw ospf:retransmit-interval? common-def:time-interval-sec
| | | | | ---rw ospf:transmit-delay? common-def:time-interval-sec
| | | | | ---rw ospf:md5-authentication
| | | | | | ---rw ospf:key-activation-wait-time?
common-def:time-interval-sec
| | | | | | ---rw ospf:no-encrypt-key-table
| | | | | | | ---rw ospf:no-encrypt-key-id? uint32
| | | | | | | ---rw ospf:no-encrypt-key? ospf-auth-psswd-string
| | | | | | ---rw ospf:key-table
| | | | | | | ---rw ospf:key-id? uint32
| | | | | | | ---rw ospf:key? key-type
| | | | | | | ---rw ospf:md5-authentication-key? ospf-auth-psswd-string
| | | | | ---rw ospf:cost? uint32
| | | | | ---rw ospf:database-filter
| | | | | | ---rw ospf:all-out? empty
| | | | | | ---rw ospf:all-external? database-filter-options
| | | | | | ---rw ospf:all-summary-external? database-filter-options
| | | | | ---rw ospf:mtu-ignore? empty
| | | | | ---rw ospf:network? enumeration
| | | | | ---rw ospf:active? empty
| | | | | ---rw ospf:passive? empty
| | | | | ---rw ospf:priority? uint32

module: brocade-interface
---rw interface
| ---rw gigabitethernet [name]
| | ---rw ip
| | | ---rw ospf:interface-gi-ospf-conf
| | | | ---rw ospf:ospfl
| | | | | ---rw ospf:area? ospf-area-id
| | | | | ---rw ospf:auth-change-wait-time? common-def:time-interval-sec
| | | | | ---rw ospf:authentication-key
| | | | | | ---rw ospf:no-encrypt-auth-key-table
| | | | | | | ---rw ospf:no-encrypt-auth-key? ospf-auth-psswd-string

```


brocade-pim

Description Provides a data model to configure PIM.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  +--rw router
  |   +--rw pim:hide-pim-holder
  |   |   +--rw pim:pim?
  |   |   |   +--rw pim:max-mcache?          uint32
  |   |   |   +--rw pim:hello-interval?      int16
  |   |   |   +--rw pim:nbr-timeout?         int16
  |   |   |   +--rw pim:inactivity-timer?    int16
  |   |   |   +--rw pim:message-interval?    uint32
  |   |   |   +--rw pim:spt-threshold?       spt-thr-type
  |   |   |   +--rw pim:bsr-candidate
  |   |   |   |   +--rw pim:bsr-cand-interface [bsr-cand-intf-type
  |   |   |   |   |   bsr-cand-intf-id]
  |   |   |   |   |   +--rw pim:bsr-cand-intf-type    pim-intf-types
  |   |   |   |   |   +--rw pim:bsr-cand-intf-id      string
  |   |   |   |   |   +--rw pim:hash-mask-length?    uint16
  |   |   |   |   |   +--rw pim:bsr-cand-priority?   uint32
  |   |   |   |   +--rw pim:rp-candidate
  |   |   |   |   |   +--rw pim:rp-cand-interface [rp-cand-intf-type rp-cand-intf-id]
  |   |   |   |   |   |   +--rw pim:rp-cand-intf-type    pim-intf-types
  |   |   |   |   |   |   +--rw pim:rp-cand-intf-id      string
  |   |   |   |   |   +--rw pim:rp-cand-grp-prefix [rp-cand-grp-prefix-action
  |   |   |   |   |   |   rp-cand-grp-prefix-ip rp-cand-grp-prefix-length]
  |   |   |   |   |   |   +--rw pim:rp-cand-grp-prefix-action    grp-prefix-action
  |   |   |   |   |   |   +--rw pim:rp-cand-grp-prefix-ip      pim-grp-prefix-addr
  |   |   |   |   |   |   +--rw pim:rp-cand-grp-prefix-length  uint16
  |   |   |   |   |   +--rw pim:rp-address [rp-ip-addr]
  |   |   |   |   |   |   +--rw pim:rp-ip-addr      inet:ipv4-address
  |   |   |   |   |   |   +--rw pim:prefix-list?    string
  |   |   |   |   +--rw pim:rp-address [rp-ip-addr]
  |   |   |   |   |   +--rw pim:rp-ip-addr      inet:ipv4-address
  |   |   |   |   |   +--rw pim:prefix-list?    string

module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   |   +--rw ip
  |   |   |   +--rw pim:pim-intf-phy-cont
  |   |   |   |   +--rw pim:pim-int-cmd
  |   |   |   |   |   +--rw pim:pim-sparse?          empty
  |   |   |   |   |   +--rw pim:pim
  |   |   |   |   |   |   +--rw pim:dr-priority?      uint32
  |   |   |   |   |   |   +--rw pim:ttl-threshold?   uint32
  |   |   |   |   |   |   +--rw pim:multicast-boundary? empty

module: brocade-interface
  +--rw interface
  |   +--rw tengigabitethernet [name]
  |   |   +--rw ip
  |   |   |   +--rw pim:pim-intf-phy-cont
  |   |   |   |   +--rw pim:pim-int-cmd
  |   |   |   |   |   +--rw pim:pim-sparse?          empty

```

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```

| | |      +--rw pim:pim
| | |      |   +--rw pim:dr-priority?   uint32
| | |      |   +--rw pim:ttl-threshold? uint32
| | |      +--rw pim:multicast-boundary? empty

module: brocade-interface
+--rw interface
|   +--rw fortygigabitethernet [name]
|   |   +--rw ip
|   |   |   +--rw pim:pim-intf-phy-cont
|   |   |   +--rw pim:pim-int-cmd
|   |   |   +--rw pim:pim-sparse?      empty
|   |   |   +--rw pim:pim
|   |   |   |   +--rw pim:dr-priority?   uint32
|   |   |   |   +--rw pim:ttl-threshold? uint32
|   |   |   +--rw pim:multicast-boundary? empty

module: brocade-interface
+--rw interface
|   +--rw hundredgigabitethernet [name]
|   |   +--rw ip
|   |   |   +--rw pim:pim-intf-phy-cont
|   |   |   +--rw pim:pim-int-cmd
|   |   |   +--rw pim:pim-sparse?      empty
|   |   |   +--rw pim:pim
|   |   |   |   +--rw pim:dr-priority?   uint32
|   |   |   |   +--rw pim:ttl-threshold? uint32
|   |   |   +--rw pim:multicast-boundary? empty

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
+--rw brocade-interface:interface
|   +--rw brocade-interface:ve [name]
|   |   +--rw ip-config:ip
|   |   |   +--rw pim:pim-intf-vlan-cont
|   |   |   +--rw pim:pim-int-cmd
|   |   |   +--rw pim:pim-sparse?      empty
|   |   |   +--rw pim:pim
|   |   |   |   +--rw pim:dr-priority?   uint32
|   |   |   |   +--rw pim:ttl-threshold? uint32
|   |   |   +--rw pim:multicast-boundary? empty

module: brocade-interface
+--rw interface-vlan
|   +--rw interface
|   |   +--rw ve [name]
|   |   |   +--rw ip
|   |   |   |   +--rw pim:pim-intf-vlan-cont
|   |   |   |   +--rw pim:pim-int-cmd
|   |   |   |   +--rw pim:pim-sparse?      empty
|   |   |   |   +--rw pim:pim
|   |   |   |   |   +--rw pim:dr-priority?   uint32
|   |   |   |   |   +--rw pim:ttl-threshold? uint32
|   |   |   +--rw pim:multicast-boundary? empty

```

RPCs None

Actions None

brocade-policer

Description Provides a data model for the Modular QoS CLI (MQC). It provides container nodes to define and manage the following MQC entities:

- A class map that classifies traffic according to traffic properties that you configure with MQC parameters.
- A police priority map that remaps frame Class of Service (CoS) values (802.1p priority bits in a VLAN tag) to conform color or exceed color values when rates conform or exceed limits set in a classification map.
- A policy map is used to define a set of QoS actions to be take on the traffic when the traffic matches the classification criteria defined in the class map.
- A service policy node used to bind a policy map to an interface.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-policer
  +--rw police-priority-map [name]
  |   +--rw name          map-name-type
  |   +--rw conform
  |   |   +--rw map-pri0-conform?  priority-value
  |   |   +--rw map-pri1-conform?  priority-value
  |   |   +--rw map-pri2-conform?  priority-value
  |   |   +--rw map-pri3-conform?  priority-value
  |   |   +--rw map-pri4-conform?  priority-value
  |   |   +--rw map-pri5-conform?  priority-value
  |   |   +--rw map-pri6-conform?  priority-value
  |   |   +--rw map-pri7-conform?  priority-value
  |   +--rw exceed
  |   |   +--rw map-pri0-exceed?    priority-value
  |   |   +--rw map-pri1-exceed?    priority-value
  |   |   +--rw map-pri2-exceed?    priority-value
  |   |   +--rw map-pri3-exceed?    priority-value
  |   |   +--rw map-pri4-exceed?    priority-value
  |   |   +--rw map-pri5-exceed?    priority-value
  |   |   +--rw map-pri6-exceed?    priority-value
  |   |   +--rw map-pri7-exceed?    priority-value
  +--rw class-map [name]
  |   +--rw name          map-name-type
  |   +--rw match
  |   |   +--rw access-group
  |   |   |   +--rw access-group-name?  mac-ip-acl-name
  +--rw policy-map [po-name]
  |   +--rw po-name      map-name-type
  |   +--rw class [cl-name]
  |   |   +--rw cl-name          map-name-type
  |   |   +--rw police
  |   |   |   +--rw cir?          uint64
  |   |   |   +--rw cbs?          uint64
  |   |   |   +--rw eir?          uint64
  |   |   |   +--rw ebs?          uint64
  |   |   |   +--rw set-priority?  string
  |   |   |   +--rw conform-set-dscp?  dscp-value
  |   |   |   +--rw conform-set-prec?  precedence-value
  |   |   |   +--rw conform-set-tc?   tc-value
  |   |   |   +--rw exceed-set-dscp?  dscp-value
  |   |   |   +--rw exceed-set-prec?  precedence-value

```

```

|   +--rw exceed-set-tc?      tc-value
+--rw set
|   +--rw set_cos_tc
|   |   +--rw cos?           uint8
|   |   +--rw traffic-class? uint8
|   +--rw set_dscp
|   |   +--rw dscp?         uint16
+--rw map
|   +--rw cos-mutation?      map-name-type
|   +--rw cos-traffic-class? map-name-type
|   +--rw dscp-cos?         map-name-type
|   +--rw dscp-traffic-class? map-name-type
|   +--rw dscp-mutation?    map-name-type
|   +--rw sflow?            map-name-type
+--rw shape
|   +--rw shaping_rate?     shaping-rate-limit
+--rw scheduler
|   +--rw strict-priority
|   |   +--rw priority-number?  uint8
|   |   +--rw scheduler-type?   enumeration
|   |   +--rw dwrr-traffic-class0? uint32
|   |   +--rw dwrr-traffic-class1? uint32
|   |   +--rw dwrr-traffic-class2? uint32
|   |   +--rw dwrr-traffic-class3? uint32
|   |   +--rw dwrr-traffic-class4? uint32
|   |   +--rw dwrr-traffic-class5? uint32
|   |   +--rw dwrr-traffic-class6? uint32
|   |   +--rw dwrr-traffic-class-last? uint32
|   |   +--rw TC1?             shaping-rate-limit
|   |   +--rw TC2?             shaping-rate-limit
|   |   +--rw TC3?             shaping-rate-limit
|   |   +--rw TC4?             shaping-rate-limit
|   |   +--rw TC5?             shaping-rate-limit
|   |   +--rw TC6?             shaping-rate-limit
|   |   +--rw TC7?             shaping-rate-limit
+--rw priority-mapping-table
|   +--rw import
|   |   +--rw cee?            map-name-type

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
+--rw interface
|   +--rw gigabitethernet [name]
|   |   +--rw policer:service-policy
|   |   |   +--rw policer:in?    map-name-type
|   |   |   +--rw policer:out?  map-name-type

```

```

module: brocade-interface
+--rw interface
|   +--rw tengigabitethernet [name]
|   |   +--rw policer:service-policy
|   |   |   +--rw policer:in?    map-name-type
|   |   |   +--rw policer:out?  map-name-type

```

```

module: brocade-interface
+--rw interface
|   +--rw fortygigabitethernet [name]
|   |   +--rw policer:service-policy
|   |   |   +--rw policer:in?    map-name-type

```

```
    | | | +--rw policer:out?    map-name-type

module: brocade-interface
  +--rw interface
    | +--rw hundredgigabitethernet [name]
    | | +--rw policer:service-policy
    | | | +--rw policer:in?    map-name-type
    | | | +--rw policer:out?  map-name-type

module: brocade-interface
  +--rw interface
    | +--rw port-channel [name]
    | | +--rw policer:service-policy
    | | | +--rw policer:in?    map-name-type
    | | | +--rw policer:out?  map-name-type
```

RPCs None

Actions None

brocade-port-profile

Description Provides a data model for creating and activating port-profiles and for mapping a port-profile to MAC addresses.

A port-profile is a collection of network policies to be applied to network traffic on a given port.

Automatic Migration of Port Profiles (AMPP) provides fabric-wide configuration of Ethernet policies and achieves per-port-profile forwarding and enables network level features to support VM mobility.

With Server Virtualization, a VM can move from one physical server to another. When such a move occurs, it is ideal for the access layer to apply the network policies on the VM transparently. The Brocade Virtual Access Layer (VAL) service provides such automatic migration of the port-profile on a given VM MAC address transparently.

A port-profile typically comprises the subprofiles listed in [Table 4](#).

TABLE 4 AMPP subprofiles

Subprofile	Description
VLAN profile	VLAN membership and filtering rules. VLAN profile also provides a way to classify the VLAN based on MAC, MAC group, and C-Tag.
QoS profile	QoS policies.
FCoE profile	The attributes needed for the port to support FCoE. These attributes include FCoE VLAN, FCMAP, FCoE Priority, Virtual Fabric ID, and so on.
Security profile	Security rules needed for the server port, typically enabling 802.1x with EAP TLV extensions for VM Mobility, and MAC-based standard and extended ACLs.

VM MAC addresses are added to a port-profile to specify all the network attributes for a server port. A port-profile is activated on a server port as part of regular MAC learning. VM MAC to port-profile association is specified using the brocade-port-profile management module. The actual association in hardware is applied when the MAC address is learned.

This module also defines port-profile-domain, which is a logical-grouping of port profiles. Port profile domain can be viewed as a 4k VLAN space. Brocade switch can contain multiple port profile domains extending the traditional 4k VLAN space to support multi tenancy.

Top-level containers

Top-level nodes and their subtree hierarchies follow.

```

module: brocade-port-profile
  +--rw port-profile [name]
  |   +--rw name                               common-def:name-string128
  |   +--rw allow
  |   |   +--rw nonprofiledmacs?   empty
  |   +--rw vlan-profile?
  |   |   +--rw switchport-basic
  |   |   |   +--rw basic?   empty
  |   |   +--rw switchport
  |   |   |   +--rw mode
  |   |   |   |   +--rw vlan-mode?   appm-sw-mode-type
  |   |   +--rw access
  |   |   |   +--rw vlan
  |   |   |   |   +--rw name?   interface:vlan-type
  |   |   +--rw access-mac-vlan-classification
  |   |   |   +--rw access
  |   |   |   |   +--rw vlan [access-vlan-id access-mac-address]
  |   |   |   |   +--rw access-vlan-id   interface:vlan-type

```



```

|         +--rw access-mac-address    interface:mac-address-type
+--rw access-mac-group-vlan-classification
|   +--rw access
|     +--rw vlan [access-vlan-id access-mac-group]
|       +--rw access-vlan-id          interface:vlan-type
|       +--rw access-mac-group        uint32
+--rw trunk
  +--rw allowed
  |   +--rw vlan
  |     +--rw all?                    empty
  |     +--rw none?                  empty
  |     +--rw add?                    interface:ui32-vlan-range
  |     +--rw except?                interface:ui32-vlan-range
  |     +--rw remove?                interface:ui32-vlan-range
  +--rw trunk-vlan-classification
  |   +--rw allowed
  |   +--rw vlan
  |     +--rw add [trunk-vlan-id trunk-ctag-id]
  |     |   +--rw trunk-vlan-id      interface:vlan-type
  |     |   +--rw trunk-ctag-id     interface:dot1q-vlan-type
  |     +--rw remove [trunk-vlan-id trunk-ctag-id]
  |     |   +--rw trunk-vlan-id      interface:vlan-type
  |     |   +--rw trunk-ctag-id     interface:dot1q-vlan-type
  +--rw native-vlan-classification
  |   +--rw native-vlan-id?           uint32
  |   +--rw native-vlan-ctag-id?     interface:dot1q-vlan-type
  +--rw native-vlan?                 uint32
+--rw fcoe-profile?
|   +--rw fcoeport
|     +--rw fcoe-map-name?          string
+--rw qos-profile?
|   +--rw cee?                      common-def:name-string32
|   +--rw qos
|     +--rw cos?                    int32
|     +--rw trust
|       +--rw trust-cos?            empty
|     +--rw cos-mutation?           common-def:name-string32
|     +--rw cos-traffic-class?     common-def:name-string32
+--rw flowcontrol
|   +--rw flowcontrolglobal
|     +--rw tx?                    enumeration
|     +--rw rx?                    enumeration
|     +--rw pfc [pfc-cos]
|       +--rw pfc-cos              int32
|       +--rw pfc-tx              enumeration
|       +--rw pfc-rx              enumeration
+--rw security-profile?
|   +--rw mac
|     +--rw access-group
|       +--rw access-group-name?   mac-access-list:mac-acl-name
|       +--rw in?                  empty
+--rw restrict-flooding-container
|   +--rw restrict-flooding?       empty
+--rw port-profile-global
|   +--rw port-profile [name]
|     +--rw name                    common-def:name-string128
|     +--rw activate?              empty
|     +--rw static [mac-address]
|       +--rw mac-address          mac-access-list:mac-address-type
+--rw port-profile-domain [port-profile-domain-name]

```

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```
    +---rw port-profile-domain-name    port-profile-domain-name-type
    +---rw profile [profile-name]
        +---rw profile-name            port-profile-name-type
```

External augmentations

Nodes that augment other modules and their subtrees follow.

```
module: brocade-interface
  +---rw interface
  |   +---rw gigabitethernet [name]
  |   |   +---rw appm:port-profile-port?                empty
  |   |   +---rw appm:port-profile-to-interface-associations
  |   |   |   +---rw appm:port-profile-port
  |   |   |   +---rw appm:port-to-port-profile-domain-association
  |   |   |   +---rw appm:profile-domain-name?    port-profile-domain-name-type
```

```
module: brocade-interface
  +---rw interface
  |   +---rw tengigabitethernet [name]
  |   |   +---rw appm:port-profile-port?                empty
  |   |   +---rw appm:port-profile-to-interface-associations
  |   |   |   +---rw appm:port-profile-port
  |   |   |   +---rw appm:port-to-port-profile-domain-association
  |   |   |   +---rw appm:profile-domain-name?    port-profile-domain-name-type
```

```
module: brocade-interface
  +---rw interface
  |   +---rw fortygigabitethernet [name]
  |   |   +---rw appm:port-profile-port?                empty
  |   |   +---rw appm:port-profile-to-interface-associations
  |   |   |   +---rw appm:port-profile-port
  |   |   |   +---rw appm:port-to-port-profile-domain-association
  |   |   |   +---rw appm:profile-domain-name?    port-profile-domain-name-type
```

```
module: brocade-interface
  +---rw interface
  |   +---rw hundredgigabitethernet [name]
  |   |   +---rw appm:port-profile-port?                empty
  |   |   +---rw appm:port-profile-to-interface-associations
  |   |   |   +---rw appm:port-profile-port
  |   |   |   +---rw appm:port-to-port-profile-domain-association
  |   |   |   +---rw appm:profile-domain-name?    port-profile-domain-name-type
```

```
module: brocade-interface
  +---rw interface
  |   +---rw port-channel [name]
  |   |   +---rw appm:port-profile-port?                empty
  |   |   +---rw appm:port-profile-to-interface-associations
  |   |   |   +---rw appm:port-profile-port
  |   |   |   +---rw appm:port-to-port-profile-domain-association
  |   |   |   +---rw appm:profile-domain-name?    port-profile-domain-name-type
```

RPCs None

Actions None

brocade-port-profile-ext

Description	Provides extensions to the brocade-port-profile module. It provides custom RPCs for returning information about configured port-profiles.
Top-level containers	None
External augmentations	None

RPCs Custom RPCs defined in this module follow.

```

+---x get-port-profile-for-intf
  | +--ro input
  | | +--ro rbridge-id?          uint32
  | | +--ro (request-type)?
  | | | +--: (get-request)
  | | | | +--ro interface-type?  enumeration
  | | | | +--ro interface-name?  union
  | | | +--: (getnext-request)
  | | |   +--ro last-received-interface-info
  | | |     +--ro interface-type?  enumeration
  | | |     +--ro interface-name?  union
  | | +--ro output
  | | | +--ro interface
  | | | | +--ro interface-type?  enumeration
  | | | | +--ro interface-name?  union
  | | | | +--ro port-profile
  | | | | | +--ro name?          common-def:name-string64
  | | | +--ro has-more?         boolean
  +---x get-port-profile-status
    +--ro input
    | +--ro rbridge-id?          uint32
    | +--ro port-profile-name?   common-def:name-string64
    | +--ro port-profile-status? enumeration
    | +--ro (request-type)?
    | | +--: (getnext-request)
    | |   +--ro last-received-port-profile-info
    | |     +--ro profile-name?   common-def:name-string64
    | |     +--ro profile-mac?    inet:mac-address
    +--ro output
    | +--ro port-profile [name]
    | | +--ro name                common-def:name-string64
    | | +--ro ppid?              uint32
    | | +--ro is-active?         boolean
    | | +--ro mac-association [mac]
    | | | +--ro mac                inet:mac-address
    | | | +--ro applied-interface
    | | | | +--ro interface-type?  enumeration
    | | | | +--ro interface-name?  union
    | | +--ro has-more?         boolean

```

Actions None

brocade-qos

Description Provides a data model for managing Quality of Service (QoS).

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-qos
  +-rw qos
  |
  | +-rw map
  | |
  | | +-rw dscp-mutation [dscp-mutation-map-name]
  | | |
  | | | +-rw dscp-mutation-map-name map-name-type
  | | | +-rw mark [dscp-in-values]
  | | | |
  | | | | +-rw dscp-in-values UI32DscpMutationRange
  | | | | +-rw to int32
  | | |
  | | | +-rw dscp-traffic-class [dscp-traffic-class-map-name]
  | | | |
  | | | | +-rw dscp-traffic-class-map-name map-name-type
  | | | | +-rw mark [dscp-in-values]
  | | | | |
  | | | | | +-rw dscp-in-values UI32DscpMutationRange
  | | | | | +-rw to int32
  | | |
  | | | +-rw dscp-cos [dscp-cos-map-name]
  | | | |
  | | | | +-rw dscp-cos-map-name map-name-type
  | | | | +-rw mark [dscp-in-values]
  | | | | |
  | | | | | +-rw dscp-in-values UI32DscpMutationRange
  | | | | | +-rw to int32
  | | |
  | | | +-rw cos-mutation [name]
  | | | |
  | | | | +-rw name map-name-type
  | | | | +-rw cos0? int32
  | | | | +-rw cos1? int32
  | | | | +-rw cos2? int32
  | | | | +-rw cos3? int32
  | | | | +-rw cos4? int32
  | | | | +-rw cos5? int32
  | | | | +-rw cos6? int32
  | | | | +-rw cos7 int32
  | | |
  | | | +-rw cos-traffic-class [name]
  | | | |
  | | | | +-rw name map-name-type
  | | | | +-rw cos0? int32
  | | | | +-rw cos1? int32
  | | | | +-rw cos2? int32
  | | | | +-rw cos3? int32
  | | | | +-rw cos4? int32
  | | | | +-rw cos5? int32
  | | | | +-rw cos6? int32
  | | | | +-rw cos7 int32
  | | |
  | | | +-rw red-profile [profile-id]
  | | | |
  | | | | +-rw profile-id RedProfileType
  | | | | +-rw min-threshold int32
  | | | | +-rw max-threshold int32
  | | | | +-rw drop-probability int32
  | | |
  | | | +-rw queue
  | | | |
  | | | | +-rw multicast
  | | | | |
  | | | | | +-rw scheduler
  | | | | | |
  | | | | | | +-rw dwrr
  | | | | | | |
  | | | | | | | +-rw dwrr-traffic-class0? int32
  | | | | | | | +-rw dwrr-traffic-class1? int32
  | | | | | | | +-rw dwrr-traffic-class2? int32
  | | | | | | | +-rw dwrr-traffic-class3? int32
  | | | | | | | +-rw dwrr-traffic-class4? int32
  | | | | | | | +-rw dwrr-traffic-class5? int32

```

```

| | | +-rw dwrr-traffic-class6? int32
| | | +-rw dwrr-traffic-class7? int32
| +-rw scheduler
| | +-rw strict-priority
| | | +-rw priority-number? int32
| | | +-rw scheduler-type? enumeration
| | +-rw dwrr-traffic-class0? int32
| | +-rw dwrr-traffic-class1? int32
| | +-rw dwrr-traffic-class2? int32
| | +-rw dwrr-traffic-class3? int32
| | +-rw dwrr-traffic-class4? int32
| | +-rw dwrr-traffic-class5? int32
| | +-rw dwrr-traffic-class6? int32
| | +-rw dwrr-traffic-class-last? int32
+-rw rcv-queue
| +-rw multicast
| | +-rw threshold
| | | +-rw traffic-class0? int32
| | | +-rw traffic-class1? int32
| | | +-rw traffic-class2? int32
| | | +-rw traffic-class3? int32
| | | +-rw traffic-class4? int32
| | | +-rw traffic-class5? int32
| | | +-rw traffic-class6? int32
| | | +-rw traffic-class7? int32
| +-rw rate-limit
| | +-rw limit? int32
| | +-rw burst? int32
+-rw nas
| +-rw auto-qos
| | +-rw set
| | | +-rw cos? uint32
| | | +-rw dscp? uint32
+-rw server-ip [server-ip]
| +-rw server-ip nas-ipv4-prefix
+-rw vrf [vrf-name]
| +-rw vrf-name string
+-rw vlan [vlan-number]
| +-rw vlan-number interface:vlan-type

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  | | +--rw gigabitEthernet [name]
  | | | +--rw qos:qos
  | | | | +--rw qos:default-cos? int32
  | | | | +--rw qos:trust
  | | | | | +--rw qos:trust-cos? empty
  | | | | | +--rw qos:trust-dscp? empty
  | | | | +--rw qos:cos-mutation? map-name-type
  | | | | +--rw qos:cos-traffic-class? map-name-type
  | | | | +--rw qos:dscp-mutation? map-name-type
  | | | | +--rw qos:dscp-traffic-class? map-name-type
  | | | | +--rw qos:dscp-cos? map-name-type
  | | | | +--rw qos:random-detect
  | | | | | +--rw qos:cos [red-cos-value]
  | | | | | | +--rw qos:red-cos-value uint32
  | | | | | | +--rw qos:red-profile-id? uint32
  | | | | +--rw qos:rcv-queue

```

```

| | | | | +--rw qos:cos-threshold
| | | | |   +--rw qos:cos0-threshold? uint32
| | | | |   +--rw qos:cos1-threshold? uint32
| | | | |   +--rw qos:cos2-threshold? uint32
| | | | |   +--rw qos:cos3-threshold? uint32
| | | | |   +--rw qos:cos4-threshold? uint32
| | | | |   +--rw qos:cos5-threshold? uint32
| | | | |   +--rw qos:cos6-threshold? uint32
| | | | |   +--rw qos:cos7-threshold? uint32
| | | | | +--rw qos:flowcontrol
| | | | |   +--rw qos:link-level-flowcontrol
| | | | |   +--rw qos:flowcontrol-tx? enumeration
| | | | |   +--rw qos:flowcontrol-rx? enumeration

```

```
module: brocade-interface
```

```

+--rw interface
| +--rw tengigabitethernet [name]
| | +--rw qos:qos
| | | +--rw qos:default-cos? int32
| | | +--rw qos:trust
| | | | +--rw qos:trust-cos? empty
| | | | +--rw qos:trust-dscp? empty
| | | +--rw qos:cos-mutation? map-name-type
| | | +--rw qos:cos-traffic-class? map-name-type
| | | +--rw qos:dscp-mutation? map-name-type
| | | +--rw qos:dscp-traffic-class? map-name-type
| | | +--rw qos:dscp-cos? map-name-type
| | | +--rw qos:random-detect
| | | | +--rw qos:cos [red-cos-value]
| | | | | +--rw qos:red-cos-value uint32
| | | | | +--rw qos:red-profile-id? uint32
| | | +--rw qos:rcv-queue
| | | | +--rw qos:cos-threshold
| | | | | +--rw qos:cos0-threshold? uint32
| | | | | +--rw qos:cos1-threshold? uint32
| | | | | +--rw qos:cos2-threshold? uint32
| | | | | +--rw qos:cos3-threshold? uint32
| | | | | +--rw qos:cos4-threshold? uint32
| | | | | +--rw qos:cos5-threshold? uint32
| | | | | +--rw qos:cos6-threshold? uint32
| | | | | +--rw qos:cos7-threshold? uint32
| | | +--rw qos:flowcontrol
| | | | +--rw qos:link-level-flowcontrol
| | | | | +--rw qos:flowcontrol-tx? enumeration
| | | | | +--rw qos:flowcontrol-rx? enumeration
| | | +--rw qos:pfc [pfc-cos]
| | | | +--rw qos:pfc-cos int32
| | | | +--rw qos:pfc-flowcontrol-tx enumeration
| | | | +--rw qos:pfc-flowcontrol-rx enumeration

```

```
module: brocade-interface
```

```

+--rw interface
| +--rw fortygigabitethernet [name]
| | +--rw qos:qos
| | | +--rw qos:default-cos? int32
| | | +--rw qos:trust
| | | | +--rw qos:trust-cos? empty
| | | | +--rw qos:trust-dscp? empty
| | | +--rw qos:cos-mutation? map-name-type
| | | +--rw qos:cos-traffic-class? map-name-type

```

```

| | | +--rw qos:dscp-mutation?          map-name-type
| | | +--rw qos:dscp-traffic-class?    map-name-type
| | | +--rw qos:dscp-cos?              map-name-type
| | | +--rw qos:random-detect
| | | | +--rw qos:cos [red-cos-value]
| | | | | +--rw qos:red-cos-value      uint32
| | | | | +--rw qos:red-profile-id?   uint32
| | | +--rw qos:flowcontrol
| | | | +--rw qos:link-level-flowcontrol
| | | | | +--rw qos:flowcontrol-tx?   enumeration
| | | | | +--rw qos:flowcontrol-rx?   enumeration
| | | | +--rw qos:pfc [pfc-cos]
| | | | | +--rw qos:pfc-cos           int32
| | | | | +--rw qos:pfc-flowcontrol-tx enumeration
| | | | | +--rw qos:pfc-flowcontrol-rx enumeration

module: brocade-interface
+--rw interface
| +--rw hundredgigabitethernet [name]
| | +--rw qos:qos
| | | +--rw qos:default-cos?          int32
| | | +--rw qos:trust
| | | | +--rw qos:trust-cos?         empty
| | | | +--rw qos:trust-dscp?       empty
| | | +--rw qos:cos-mutation?        map-name-type
| | | +--rw qos:cos-traffic-class?    map-name-type
| | | +--rw qos:dscp-mutation?        map-name-type
| | | +--rw qos:dscp-traffic-class?   map-name-type
| | | +--rw qos:dscp-cos?             map-name-type
| | | +--rw qos:random-detect
| | | | +--rw qos:cos [red-cos-value]
| | | | | +--rw qos:red-cos-value    uint32
| | | | | +--rw qos:red-profile-id?  uint32
| | | +--rw qos:flowcontrol
| | | | +--rw qos:link-level-flowcontrol
| | | | | +--rw qos:flowcontrol-tx?   enumeration
| | | | | +--rw qos:flowcontrol-rx?   enumeration
| | | | +--rw qos:pfc [pfc-cos]
| | | | | +--rw qos:pfc-cos           int32
| | | | | +--rw qos:pfc-flowcontrol-tx enumeration
| | | | | +--rw qos:pfc-flowcontrol-rx enumeration

```

```

module: brocade-interface
+--rw interface
| +--rw port-channel [name]
| | +--rw qos:qos
| | | +--rw qos:default-cos?          int32
| | | +--rw qos:trust
| | | | +--rw qos:trust-cos?         empty
| | | | +--rw qos:trust-dscp?       empty
| | | +--rw qos:cos-mutation?        map-name-type
| | | +--rw qos:cos-traffic-class?    map-name-type
| | | +--rw qos:dscp-mutation?        map-name-type
| | | +--rw qos:dscp-traffic-class?   map-name-type
| | | +--rw qos:dscp-cos?             map-name-type
| | | +--rw qos:random-detect
| | | | +--rw qos:cos [red-cos-value]
| | | | | +--rw qos:red-cos-value    uint32
| | | | | +--rw qos:red-profile-id?  uint32
| | | +--rw qos:flowcontrol

```

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```

| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
+--rw qos:link-level-flowcontrol
|   +--rw qos:flowcontrol-tx?  enumeration
|   +--rw qos:flowcontrol-rx?  enumeration
+--rw qos:pfc [pfc-cos]
|   +--rw qos:pfc-cos          int32
|   +--rw qos:pfc-flowcontrol-tx enumeration
|   +--rw qos:pfc-flowcontrol-rx enumeration

```

RPCs None

Actions None

brocade-ras

Description Provides a data model for managing to log collections, such as those used by supportsave and copy support operations, and for USB management.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-ras
  +--rw copy
  |   +--rw support
  +--rw logging
  |   +--rw raslog
  |   |   +--rw message
  |   |   |   +--rw msgId [msgId]
  |   |   |   |   +--rw msgId      string
  |   |   |   |   +--rw severity? message-severity
  |   |   |   |   +--rw suppress? empty
  |   |   |   |   +--rw syslog?   empty
  |   |   +--rw module
  |   |   |   +--rw modId [modId]
  |   |   |   |   +--rw modId      string
  |   |   +--rw console? raslog-console
  +--rw syslog-server [syslogip]
  |   +--rw syslogip      inet:ip-address
  |   +--rw secure?      empty
  |   +--rw port?        uint16
  +--rw auditlog
  |   +--rw class [class]
  |   |   +--rw class      audit-class
  +--rw syslog-facility
  |   +--rw local?      facility-enum
  +--rw syslog-client
  |   +--rw localip      iptype-enum
  +--rw destination_console
  |   +--rw logging
  |   |   +--rw raslog
  |   |   |   +--ro console
  |   |   |   |   +--ro input
  |   |   |   |   |   +--ro (ras-con)?
  |   |   |   |   |   |   +--:(stop)
  |   |   |   |   |   |   |   +--ro stop      uint32
  |   |   |   |   |   |   |   +--:(start)
  |   |   |   |   |   |   |   +--ro start?   empty
  |   |   |   |   |   +--ro rbridge-id? switchidType
  +--rw system
  |   +--rw usb
  |   +--rw switch-attributes
  |   |   +--rw rbridge-id [rbridge-id]
  |   |   |   +--rw rbridge-id      switchidType-noall
  |   |   |   +--rw chassis-name? string
  |   |   |   +--rw host-name?     string
  |   |   +--rw chassis-name?     string
  |   |   +--rw host-name?        string
  +--rw support
  |   +--rw autoupload-param
  |   |   +--rw hostip      inet:ip-address
  |   |   +--rw username   string
  |   |   +--rw directory  string
  |   |   +--rw protocol   string

```

```

| | +--rw password?    string
| +--rw support-param
| | +--rw hostip      inet:ip-address
| | +--rw username    string
| | +--rw directory   string
| | +--rw protocol    string
| | +--rw password?   string
| +--rw autoupload
| | +--rw enable?     empty
| +--rw ffdc?        empty
+--rw logtest
| +--rw raslog
+--rw auditlog
+--rw resource-monitor

```

External augmentations None

RPCs Custom RPCs defined in this module follow.

```

+---x bna-config-cmd
| +--ro input
| | +--ro src      string
| | +--ro dest    string
| +--ro output
| | +--ro session-id    uint32
| | +--ro status        cmd-status
| | +--ro status-string? string
+---x bna-config-cmd-status
+--ro input
| +--ro session-id    uint32
+--ro output
| +--ro status        cmd-status
| +--ro status-string? string

```

Actions Proprietary actions defined in this module follow.

Upload support data to FTP server:

```

module: brocade-ras
+--rw copy
| +--rw support
| | +--ro ftp
| | | +--ro input
| | | | +--ro user      string
| | | | +--ro host      string
| | | | +--ro directory  directory-path
| | | | +--ro password?  string
| | | | +--ro rbridge-id? rbridge-ids-all-type
| | | | +--ro timeout?   timeout-value
| | | +--ro output
| | | | +--ro supportSaveResult [rbridge-id]
| | | | | +--ro rbridge-id    switchidType
| | | | | +--ro status-code   copy-support-status
| | | | | +--ro status-str?  string

```

Upload support data to SCP server:

```

module: brocade-ras

```

```

+--rw copy
| +--rw support
| | +--ro scp
| | | +--ro input
| | | | +--ro user          string
| | | | +--ro host          string
| | | | +--ro directory     directory-path
| | | | +--ro password?     string
| | | | +--ro rbridge-id?   rbridge-ids-all-type
| | | | +--ro timeout?      timeout-value
| | | +--ro output
| | | | +--ro supportSaveResult [rbridge-id]
| | | | +--ro rbridge-id      switchidType
| | | | +--ro status-code     copy-support-status
| | | | +--ro status-str?    string

```

Upload support data to USB device:

```

module: brocade-ras
+--rw copy
| +--rw support
| | +--ro usb
| | | +--ro input
| | | | +--ro directory     string
| | | | +--ro rbridge-id?   rbridge-ids-all-type
| | | | +--ro timeout?      timeout-value
| | | +--ro output
| | | | +--ro supportSaveResult [rbridge-id]
| | | | +--ro rbridge-id      switchidType
| | | | +--ro status-code     copy-support-status
| | | | +--ro status-str?    string

```

Enable interactive mode:

```

module: brocade-ras
+--rw copy
| +--ro support-interactive
| | +--ro input
| | +--ro output
| | +--ro result?  string

```

Display the logs in the console:

```

module: brocade-ras
+--rw logging
| +--rw raslog
| | +--rw console?  raslog-console

```

Enable USB:

```

module: brocade-ras
+--rw system
| +--rw usb
| | +--ro on
| | | +--ro input
| | | +--ro rbridge-id?  switchidType

```

Disable USB:

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```
module: brocade-ras
  +--rw system
  |   +--rw usb
  |   |   +--ro off
  |   |   |   +--ro input
  |   |   |   +--ro rbridge-id?   switchidType
```

List a USB directory:

```
module: brocade-ras
  +--rw system
  |   +--rw usb
  |   |   +--ro dir
  |   |   |   +--ro input
  |   |   |   +--ro rbridge-id?   switchidType
```

Remove a USB file:

```
module: brocade-ras
  +--rw system
  |   +--rw usb
  |   |   +--ro remove
  |   |   |   +--ro input
  |   |   |   +--ro directory   string
  |   |   |   +--ro file       string
  |   |   |   +--ro rbridge-id? switchidType
```

Generate message for internal RASlog test:

```
module: brocade-ras
  +--rw logtest
  |   +--rw raslog
  |   |   +--ro gmsg
  |   |   |   +--ro input
  |   |   |   +--ro messageID? string
```

Generate audit log message for internal audit log test:

```
module: brocade-ras
  +--rw auditlog
  |   +--ro gmsg
  |   |   +--ro input
  |   |   +--ro messageID? string
```

Enable/Disable memory:

```
module: brocade-ras
  +--rw resource-monitor
  |   +--ro memory
  |   |   +--ro input
  |   |   |   +--ro (srm)?
  |   |   |   |   +--:(enable)
  |   |   |   |   |   +--ro enable?   empty
  |   |   |   |   +--:(disable)
  |   |   |   |   +--ro disable?   empty
```

Enable/Disable CPU:

```
module: brocade-ras
  +--rw resource-monitor
    +--ro cpu
      +--ro input
        +--ro (srm)?
          +--:(enable)
            | +--ro enable?   empty
          +--:(disable)
            +--ro disable?   empty
```

brocade-ras-ext

Description Provides a data model for managing RASlog-related information.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-ras-ext
  +--rw rasman
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw ras-extensions:support
  |   |   +--ro ras-extensions:support
  |   |   +--ro ras-extensions:input
  |   |   |   +--ro ras-extensions:rbridge-id?   rbridge-ids-all-type
  |   |   +--ro ras-extensions:output
```

RPCs Custom RPCs defined in this module follow.

```
+---x show-raslog
  |   +--ro input
  |   |   +--ro rbridge-id?           switchid-type
  |   |   +--ro number-of-latest-events?  uint32
  |   +--ro output
  |   |   +--ro show-all-raslog
  |   |   |   +--ro rbridge-id?           switchid-type
  |   |   |   +--ro number-of-entries?   uint32
  |   |   |   +--ro raslog-entries
  |   |   |   |   +--ro index?           uint32
  |   |   |   |   +--ro message-id?      string
  |   |   |   |   +--ro date-and-time-info? string
  |   |   |   |   +--ro severity?        enumeration
  |   |   |   |   +--ro repeat-count?    uint32
  |   |   |   |   +--ro message?         string
  |   |   |   |   +--ro message-flag?    enumeration
  |   |   |   |   +--ro log-type?        enumeration
  |   |   |   |   +--ro switch-or-chassis-name? string
  |   |   |   +--ro cmd-status-error-msg? string
  +---x show-support-save-status
  |   +--ro input
  |   |   +--ro rbridge-id?   switchid-type
  |   +--ro output
  |   |   +--ro show-support-save-status
  |   |   |   +--ro rbridge-id?           switchid-type
  |   |   |   +--ro status?              enumeration
  |   |   |   +--ro message?            string
  |   |   |   +--ro percentage-of-completion? uint32
  +---x show-system-info
  |   +--ro input
  |   |   +--ro rbridge-id?   switchid-type
  |   +--ro output
  |   |   +--ro show-system-info
  |   |   |   +--ro rbridge-id?   switchid-type
  |   |   |   +--ro stack-mac?    ietfyang:mac-address
```

Actions Proprietary actions defined in this module follow.

Show support information available for upload:

```

module: brocade-common-def
  +--rw show
  |   +--rw ras-extensions:support
  |   |   +--ro ras-extensions:support
  |   |   |   +--ro ras-extensions:input
  |   |   |   |   +--ro ras-extensions:rbridge-id?   rbridge-ids-all-type
  |   |   |   +--ro ras-extensions:output

```

Copy support details:

```

module: brocade-common-def
  +--rw show
  |   +--rw ras-extensions:copy-support
  |   |   +--ro ras-extensions:status
  |   |   |   +--ro ras-extensions:input
  |   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-type
  |   |   |   +--ro ras-extensions:output

```

Return inventory information:

```

module: brocade-common-def
  +--rw show
  |   +--rw ras-extensions:infra-inventory
  |   |   +--ro ras-extensions:inventory
  |   |   |   +--ro ras-extensions:input
  |   |   |   |   +--ro (opt)?
  |   |   |   |   |   +---:(chassis)
  |   |   |   |   |   |   +--ro ras-extensions:chassis?   empty
  |   |   |   |   |   |   +---:(fan)
  |   |   |   |   |   |   |   +--ro ras-extensions:fan?   empty
  |   |   |   |   |   |   +---:(module)
  |   |   |   |   |   |   |   +--ro ras-extensions:module?   empty
  |   |   |   |   |   |   +---:(powerSupply)
  |   |   |   |   |   |   |   +--ro ras-extensions:powerSupply?   empty
  |   |   |   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-range
  |   |   |   +--ro ras-extensions:output

```

Show chassis information:

```

module: brocade-common-def
  +--rw show
  |   +--rw ras-extensions:infra
  |   |   +--ro ras-extensions:chassis
  |   |   |   +--ro ras-extensions:input
  |   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-type
  |   |   |   +--ro ras-extensions:output
  |   |   |   +--ro ras-extensions:chassis-info [rbridge-id]
  |   |   |   |   +--ro ras-extensions:rbridge-id   switchid-type
  |   |   |   |   +--ro ras-extensions:switch-type   uint32
  |   |   |   |   +--ro ras-extensions:vendor       string
  |   |   |   |   +--ro ras-extensions:vendor-version   string
  |   |   |   |   +--ro ras-extensions:supplier-serial-number?   string
  |   |   |   |   +--ro ras-extensions:chassis-service-tag?   string
  |   |   |   |   +--ro ras-extensions:bay-id?   string
  |   |   |   |   +--ro ras-extensions:vendor-part-number?   string
  |   |   |   |   +--ro ras-extensions:brocade-part-number?   string
  |   |   |   |   +--ro ras-extensions:max-port?   int32

```

```

| | | +--ro ras-extensions:is-ha-enabled?          boolean
| | | +--ro ras-extensions:is-ha-redundant?      boolean
| | | +--ro ras-extensions:is-ha-heartbeat-up?   boolean
| | | +--ro ras-extensions:is-ha-synchronized?   boolean
| | | +--ro ras-extensions:ha-recovery?          ha-recovery-type
| | | +--ro ras-extensions:fru
| | |   +--ro ras-extensions:tag                  uint32
| | |   +--ro ras-extensions:part-number         string
| | |   +--ro ras-extensions:serial-number       string
| | |   +--ro ras-extensions:field-replacable    boolean
| | |   +--ro ras-extensions:slot-number         uint32
| | |   +--ro ras-extensions:logical-slot-number? uint32
| | |   +--ro ras-extensions:blade-type-id?     uint32
| | |   +--ro ras-extensions:slot-eth-port-cnt? uint32
| | |   +--ro ras-extensions:manufacturer-date  xs:date
| | |   +--ro ras-extensions:update-date        xs:date
| | |   +--ro ras-extensions:version            string
| | |   +--ro ras-extensions:vendor-equipment-type fru-type
| | |   +--ro ras-extensions:operational-status
fru-operational-status
| | |   +--ro ras-extensions:manufacturer        string
| | |   +--ro ras-extensions:vendor?            string
| | |   +--ro ras-extensions:vendor-part-number? string
| | |   +--ro ras-extensions:vendor-serial-number? string

```

List process information:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:process
| | | +--ro ras-extensions:info
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id?  switchid-type
| | | | | +--ro ras-extensions:output

```

List processes by memory usage:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:process
| | | +--ro ras-extensions:memory
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id?  switchid-type
| | | | | +--ro ras-extensions:summary?    empty
| | | | | +--ro ras-extensions:output

```

List processes by CPU usage:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:process
| | | +--ro ras-extensions:cpu
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id?  switchid-type
| | | | | +--ro ras-extensions:summary?    empty
| | | | | +--ro ras-extensions:history?    empty

```



```

| | | | +--ro ras-extensions:top? empty
| | | | +--ro ras-extensions:output

```

Show fan information:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:environment
| | | +--ro ras-extensions:fan
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id? switchid-type
| | | | +--ro ras-extensions:output

```

Show power information:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:environment
| | | +--ro ras-extensions:power
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id? switchid-type
| | | | +--ro ras-extensions:output

```

Show temperature information:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:environment
| | | +--ro ras-extensions:temp
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id? switchid-type
| | | | +--ro ras-extensions:output

```

Return sensor information:

```

module: brocade-common-def
+--rw show
| +--rw ras-extensions:infra
| | +--rw ras-extensions:environment
| | | +--ro ras-extensions:sensor
| | | | +--ro ras-extensions:input
| | | | | +--ro ras-extensions:rbridge-id? switchid-type
| | | | +--ro ras-extensions:output
| | | | | +--ro ras-extensions:sensor-info [rbridge-id]
| | | | | | +--ro ras-extensions:rbridge-id switchid-type
| | | | | | +--ro ras-extensions:sensor
| | | | | | | +--ro ras-extensions:id uint32
| | | | | | | +--ro ras-extensions:type sensor-type
| | | | | | | +--ro ras-extensions:sub-type uint32
| | | | | | | +--ro ras-extensions:status sensor-status
| | | | | | +--ro ras-extensions:current-reading int32

```

Show history information:

```

module: brocade-common-def

```

```

+--rw show
|   +--rw ras-extensions:infra
|   |   +--ro ras-extensions:history
|   |   +--ro ras-extensions:input
|   |   |   +--ro ras-extensions:rbridge-id?   switchid-type
|   |   +--ro ras-extensions:output

```

Show RASlog entries:

```

module: brocade-common-def
+--rw show
|   +--rw ras-extensions:logging
|   |   +--ro ras-extensions:raslog
|   |   |   +--ro ras-extensions:input
|   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-type-noall
|   |   |   |   +--ro ras-extensions:reverse?   empty
|   |   |   |   +--ro ras-extensions:message-type?   enumeration
|   |   |   |   +--ro ras-extensions:attribute?   enumeration
|   |   |   |   +--ro ras-extensions:blade?   string
|   |   |   |   +--ro ras-extensions:count?   uint16
|   |   |   |   +--ro ras-extensions:severity?   enumeration
|   |   +--ro ras-extensions:output

```

Show audit log entries:

```

module: brocade-common-def
+--rw show
|   +--rw ras-extensions:logging
|   |   +--ro ras-extensions:auditlog
|   |   |   +--ro ras-extensions:input
|   |   |   |   +--ro ras-extensions:reverse?   empty
|   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-type-noall
|   |   +--ro ras-extensions:output

```

Clear support information:

```

module: brocade-common-def
+--rw clear
|   +--rw ras-extensions:support
|   |   +--ro ras-extensions:support
|   |   |   +--ro ras-extensions:input
|   |   |   |   +--ro ras-extensions:rbridge-id?   rbridge-ids-all-type
|   |   +--ro ras-extensions:output

```

Clear RASlog:

```

module: brocade-common-def
+--rw clear
|   +--rw ras-extensions:logging
|   |   +--ro ras-extensions:raslog
|   |   |   +--ro ras-extensions:input
|   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-type
|   |   |   |   +--ro ras-extensions:message-type?   enumeration
|   |   +--ro ras-extensions:output

```

Clear audit log:

```
module: brocade-common-def
  +--rw clear
  |   +--rw ras-extensions:logging
  |   |   +--ro ras-extensions:auditlog
  |   |   |   +--ro ras-extensions:input
  |   |   |   |   +--ro ras-extensions:rbridge-id?   switchid-type
  |   |   |   |   +--ro ras-extensions:output
```

brocade-rbridge

Description Provides a data model for managing routing bridge IDs.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw rbridge-id                               uint32
    +--ro swbd-number?                             int32
    +--rw interface-nodespecific
      | +--rw ns-vlan?                             int32
      | +--rw ns-ethernet?                         int32
    +--rw ip
    +--rw ipv6
    +--rw router
    +--rw switch-attributes
      | +--rw chassis-name?                        string
      | +--rw host-name?                          string
  
```

External augmentations None

RPCs None

Actions None

brocade-rmon

Description Provides a data model for managing Remote Monitor (RMON). It facilitates configuring RMON events, RMON alarms, RMON Ethernet group statistics collections and collection histories.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-rmon
  +--rw rmon
    +--rw event-entry [event-index]
      | +--rw event-index          event-index-type
      | +--rw event-description?  event-description-type
      | +--rw log?                empty
      | +--rw event-community?    string
      | +--rw event-owner?        owner-string
    +--rw alarm-entry [alarm-index]
      +--rw alarm-index           alarm-index-type
      +--rw snmp-oid              snmp-oid-type
      +--rw alarm-interval        uint32
      +--rw alarm-sample          alarm-sample-type
      +--rw alarm-rising-threshold uint32
      +--rw alarm-rising-event-index alarm-rising-event-index-type
      +--rw alarm-falling-threshold? uint32
      +--rw alarm-falling-event-index? alarm-falling-event-index-type
      +--rw alarm-owner?         owner-string

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
    | +--rw gigabitethernet [name]
    | | +--rw rmon:rmon
    | | | +--rw rmon:collection
    | | | | +--rw rmon:ether-stats-entry [ether-stats-index]
    | | | | | +--rw rmon:ether-stats-index  ether-stats-index-type
    | | | | | +--rw rmon:ether-stats-owner? owner-string
    | | | | +--rw rmon:history-control-entry [history-control-index]
    | | | | +--rw rmon:history-control-index
    | | | | history-control-index-type
    | | | | | +--rw rmon:history-control-buckets-requested?
    | | | | | history-control-buckets-requested-type
    | | | | | +--rw rmon:history-control-interval?
    | | | | | history-control-interval-type
    | | | | | +--rw rmon:history-control-owner?          owner-string
  module: brocade-interface
    +--rw interface
      | +--rw tengigabitethernet [name]
      | | +--rw rmon:rmon
      | | | +--rw rmon:collection
      | | | | +--rw rmon:ether-stats-entry [ether-stats-index]
      | | | | | +--rw rmon:ether-stats-index  ether-stats-index-type
      | | | | | +--rw rmon:ether-stats-owner? owner-string
      | | | | +--rw rmon:history-control-entry [history-control-index]
      | | | | +--rw rmon:history-control-index
      | | | | history-control-index-type
      | | | | | +--rw rmon:history-control-buckets-requested?
      | | | | | history-control-buckets-requested-type

```

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```
    | | |      +---rw rmon:history-control-interval?
history-control-interval-type
    | | |      +---rw rmon:history-control-owner?          owner-string

module: brocade-interface
  +---rw interface
  |   +---rw fortygigabitethernet [name]
  |   |   +---rw rmon:rmon
  |   |   |   +---rw rmon:collection
  |   |   |   |   +---rw rmon:ether-stats-entry [ether-stats-index]
  |   |   |   |   |   +---rw rmon:ether-stats-index      ether-stats-index-type
  |   |   |   |   |   +---rw rmon:ether-stats-owner?    owner-string
  |   |   |   |   +---rw rmon:history-control-entry [history-control-index]
  |   |   |   +---rw rmon:history-control-index
history-control-index-type
  | | |      +---rw rmon:history-control-buckets-requested?
history-control-buckets-requested-type
  | | |      +---rw rmon:history-control-interval?
history-control-interval-type
  | | |      +---rw rmon:history-control-owner?          owner-string

module: brocade-interface
  +---rw interface
  |   +---rw hundredgigabitethernet [name]
  |   |   +---rw rmon:rmon
  |   |   |   +---rw rmon:collection
  |   |   |   |   +---rw rmon:ether-stats-entry [ether-stats-index]
  |   |   |   |   |   +---rw rmon:ether-stats-index      ether-stats-index-type
  |   |   |   |   |   +---rw rmon:ether-stats-owner?    owner-string
  |   |   |   |   +---rw rmon:history-control-entry [history-control-index]
  |   |   |   +---rw rmon:history-control-index
history-control-index-type
  | | |      +---rw rmon:history-control-buckets-requested?
history-control-buckets-requested-type
  | | |      +---rw rmon:history-control-interval?
history-control-interval-type
  | | |      +---rw rmon:history-control-owner?          owner-string
```

RPCs None

Actions None

brocade-rtm

Description Provides a data model for IP routes.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw ip
      +--rw rtm:rtm-config
        +--rw rtm:router-id?      inet:ipv4-address
        +--rw rtm:load-sharing?   uint32
        +--rw rtm:route
          +--rw rtm:next-hop-enable-default?  empty
          +--rw rtm:next-hop-recursion?      uint32
          +--rw rtm:next-hop [proto]
            +--rw rtm:proto  enumeration
          +--rw rtm:static-route-nh [static-route-dest static-route-next-hop]
            +--rw rtm:static-route-dest      inet:ipv4-prefix
            +--rw rtm:static-route-next-hop  inet:ipv4-address
            +--rw rtm:route-attributes
              +--rw rtm:metric?      uint32
              +--rw rtm:distance?   uint32
              +--rw rtm:tag?        uint32
          +--rw rtm:static-route-nh-vrf [static-route-next-vrf-dest
next-hop-vrf static-route-next-hop]
            +--rw rtm:static-route-next-vrf-dest  inet:ipv4-prefix
            +--rw rtm:next-hop-vrf                string
            +--rw rtm:static-route-next-hop      inet:ipv4-address
          +--rw rtm:static-route-oif [static-route-dest static-route-oif-type
static-route-oif-name]
            +--rw rtm:static-route-dest      inet:ipv4-prefix
            +--rw rtm:static-route-oif-type  enumeration
            +--rw rtm:static-route-oif-name  string
            +--rw rtm:route-attributes
              +--rw rtm:metric?      uint32
              +--rw rtm:distance?   uint32
              +--rw rtm:tag?        uint32

module: brocade-common-def
  +--rw ip
    +--rw rtm:rtm-config
      +--rw rtm:router-id?      inet:ipv4-address
      +--rw rtm:load-sharing?   uint32
      +--rw rtm:route
        +--rw rtm:next-hop-enable-default?  empty
        +--rw rtm:next-hop-recursion?      uint32
        +--rw rtm:next-hop [proto]
          +--rw rtm:proto  enumeration
        +--rw rtm:static-route-nh [static-route-dest static-route-next-hop]
          +--rw rtm:static-route-dest      inet:ipv4-prefix
          +--rw rtm:static-route-next-hop  inet:ipv4-address
          +--rw rtm:route-attributes
            +--rw rtm:metric?      uint32
            +--rw rtm:distance?   uint32
            +--rw rtm:tag?        uint32

```

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```

    |         +---rw rtm:static-route-nh-vrf [static-route-next-vrf-dest next-hop-vrf
static-route-next-hop]
    |         | +---rw rtm:static-route-next-vrf-dest      inet:ipv4-prefix
    |         | +---rw rtm:next-hop-vrf                    string
    |         | +---rw rtm:static-route-next-hop           inet:ipv4-address
    |         +---rw rtm:static-route-oif [static-route-dest static-route-oif-type
static-route-oif-name]
    |         +---rw rtm:static-route-dest                inet:ipv4-prefix
    |         +---rw rtm:static-route-oif-type            enumeration
    |         +---rw rtm:static-route-oif-name            string
    |         +---rw rtm:route-attributes
    |         | +---rw rtm:metric?      uint32
    |         | +---rw rtm:distance?    uint32
    |         | +---rw rtm:tag?         uint32
    |
module: brocade-rbridge
    +---rw rbridge-id [rbridge-id]
    +---rw vrf:vrf [vrf-name]
    |   +---rw vrf:address-family
    |   |   +---rw vrf:ipv4 [max-route]
    |   |   +---rw rtm:ip
    |   |   |   +---rw rtm:route
    |   |   |   |   +---rw rtm:next-hop-enable-default?  empty
    |   |   |   |   +---rw rtm:next-hop-recursion?      uint32
    |   |   |   |   +---rw rtm:next-hop [proto]
    |   |   |   |   |   +---rw rtm:proto      enumeration
    |   |   |   |   +---rw rtm:static-route-nh [static-route-dest
static-route-next-hop]
    |   |   |   |   |   +---rw rtm:static-route-dest      inet:ipv4-prefix
    |   |   |   |   |   +---rw rtm:static-route-next-hop  inet:ipv4-address
    |   |   |   |   |   +---rw rtm:route-attributes
    |   |   |   |   |   |   +---rw rtm:metric?      uint32
    |   |   |   |   |   |   +---rw rtm:distance?    uint32
    |   |   |   |   |   |   +---rw rtm:tag?         uint32
    |   |   |   |   |   +---rw rtm:static-route-nh-vrf [static-route-next-vrf-dest
next-hop-vrf static-route-next-hop]
    |   |   |   |   |   |   +---rw rtm:static-route-next-vrf-dest  inet:ipv4-prefix
    |   |   |   |   |   |   +---rw rtm:next-hop-vrf                string
    |   |   |   |   |   |   +---rw rtm:static-route-next-hop       inet:ipv4-address
    |   |   |   |   |   +---rw rtm:static-route-oif [static-route-dest
static-route-oif-type static-route-oif-name]
    |   |   |   |   |   |   +---rw rtm:static-route-dest      inet:ipv4-prefix
    |   |   |   |   |   |   +---rw rtm:static-route-oif-type  enumeration
    |   |   |   |   |   |   +---rw rtm:static-route-oif-name  string
    |   |   |   |   |   |   +---rw rtm:route-attributes
    |   |   |   |   |   |   |   +---rw rtm:metric?      uint32
    |   |   |   |   |   |   |   +---rw rtm:distance?    uint32
    |   |   |   |   |   |   |   +---rw rtm:tag?         uint32
    |   |   |   |   |   |
    |   |   |   |   |   +---rw rtm:tag?         uint32

```

RPCs None

Actions None

brocade-sec-services

Description Provides a data model for configuring a Telnet server or a Secure SHell (SSH) server.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-sec-services
  +--rw telnet-sa
  |   +--rw telnet
  |       +--rw server
  |           +--rw shutdown?   empty
  +--rw ssh-sa
  |   +--rw ssh
  |       +--rw server
  |           +--rw shutdown?   empty
  |           +--rw key-exchange [protocol]
  |               +--rw protocol   key-exchange-type
  +--rw rekey-interval?   uint32

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-common-def
  +--rw show
  |   +--rw brcd-sec-services:telnet
  |       |   +--rw brcd-sec-services:server

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  |   +--rw brcd-sec-services:telnet
  |       |   +--rw brcd-sec-services:server
  |           |   +--rw brcd-sec-services:shutdown?   empty

module: brocade-common-def
  +--rw show
  |   +--rw brcd-sec-services:ssh
  |       |   +--rw brcd-sec-services:server

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
  |   +--rw brcd-sec-services:ssh
  |       |   +--rw brcd-sec-services:server
  |           |   +--rw brcd-sec-services:shutdown?   empty
  |               +--rw brcd-sec-services:key-exchange [protocol]
  |                   |   +--rw brcd-sec-services:protocol   key-exchange-type
  +--rw brcd-sec-services:rekey-interval?   uint32

```

RPCs None

Actions Proprietary actions defined in this module follow.

Display the Telnet server status.

```

module: brocade-common-def
  +--rw show
  |   +--rw brcd-sec-services:telnet
  |       |   +--rw brcd-sec-services:server
  |           |   +--ro brcd-sec-services:status

```

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Display the SSH server status.

```
module: brocade-common-def
  +--rw show
  |   +--rw brcd-sec-services:ssh
  |   |   +--rw brcd-sec-services:server
  |   |   +--ro brcd-sec-services:status
```

brocade-sflow

Description Provides a data model for configuring sFlow—an industry standard technology for monitoring high-speed switched networks.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-sflow
  +--rw sflow
  |   +--rw enable?                empty
  |   +--rw collector [collector-ip-address collector-port-number]
  |   |   +--rw collector-ip-address  inet:ip-address
  |   |   +--rw collector-port-number uint32
  |   +--rw polling-interval?      uint32
  |   +--rw sample-rate?           uint32
  +--rw sflow-profile [profile-name]
      +--rw profile-name            profile-name-type
      +--rw profile-sampling-rate?  uint32

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  |   +--rw gigabitethernet [name]
  |   |   +--rw sflow:sflow
  |   |   |   +--rw sflow:enable?                empty
  |   |   |   +--rw sflow:polling-interval?      uint32
  |   |   |   +--rw sflow:sample-rate?           uint32
  |   |   |
  |   |   +--rw tengigabitethernet [name]
  |   |   |   +--rw sflow:sflow
  |   |   |   |   +--rw sflow:enable?                empty
  |   |   |   |   +--rw sflow:polling-interval?      uint32
  |   |   |   |   +--rw sflow:sample-rate?           uint32
  |   |   |
  |   |   +--rw fortygigabitethernet [name]
  |   |   |   +--rw sflow:sflow
  |   |   |   |   +--rw sflow:enable?                empty
  |   |   |   |   +--rw sflow:polling-interval?      uint32
  |   |   |   |   +--rw sflow:sample-rate?           uint32
  |   |   |
  |   |   +--rw hundredgigabitethernet [name]
  |   |   |   +--rw sflow:sflow
  |   |   |   |   +--rw sflow:enable?                empty
  |   |   |   |   +--rw sflow:polling-interval?      uint32
  |   |   |   |   +--rw sflow:sample-rate?           uint32
  |   |   |
  |   |   +--rw sflow:sflow
  |   |   |   +--rw sflow:enable?                empty
  |   |   |   +--rw sflow:polling-interval?      uint32
  |   |   |   +--rw sflow:sample-rate?           uint32
  |   |
  |   +--rw sflow:sflow
  |   |   +--rw sflow:enable?                empty
  |   |   +--rw sflow:polling-interval?      uint32
  |   |   +--rw sflow:sample-rate?           uint32
  |   |
  |   +--rw sflow:enable?                empty
  |   +--rw sflow:polling-interval?      uint32
  |   +--rw sflow:sample-rate?           uint32

```

RPCs None

Actions None

brocade-snmp

Description Provides a data model for configuring the SNMP Server.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-snmp
  +--rw snmp-server
    +--rw context [context-name]
      | +--rw context-name    string
      | +--rw vrf-name?      string
    +--rw community [community]
      | +--rw community      string
      | +--rw access?       community-access
    +--rw user [username]
      | +--rw username       string
      | +--rw groupname?    string
      | +--rw auth?         enumeration
      | +--rw auth-password? string
      | +--rw priv?        enumeration
      | +--rw priv-password? string
      | +--rw encrypted?   empty
    +--rw v3host [hostip username]
      | +--rw hostip        inet:host
      | +--rw username      string
      | +--rw udp-port?    host-port
      | +--rw notifytype?  enumeration
      | +--rw engineid?    string
      | +--rw severity-level? sev-level
    +--rw host [ip community]
      | +--rw ip            inet:host
      | +--rw version?     host-version
      | +--rw community    string
      | +--rw udp-port?    host-port
      | +--rw severity-level? sev-level
    +--rw agtconfig
      | +--rw contact?     system-contact
      | +--rw location?    system-location
      | +--rw sys-descr?   system-description
    +--rw engineID-drop
      +--rw engineID
        +--rw local?      snmp-engineID
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw snmp-server:snmp-server
      | +--rw snmp-server:engineID
      | +--rw snmp-server:local?  snmp-engineID
  
```

RPCs None

Actions None

brocade-span

Description Provides a data model for managing the Switch Port Analyzer (SPAN) port mirroring feature.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-span
  +--rw monitor
    +--rw session [session-number]
      +--rw session-number    session-type
      +--rw description?      string
      +--rw span-command
        +--rw source?          enumeration
        +--rw src-tengigabitethernet? enumeration
        +--rw src-tengigabitethernet-val? span-if-type
        +--rw destination?    enumeration
        +--rw dest-tengigabitethernet? enumeration
        +--rw dest-tengigabitethernet-val? span-if-type
        +--rw dest-vlan-val?   interface:vlan-type
        +--rw direction?      enumeration

```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface-vlan
  |   +--rw interface
  |   |   +--rw vlan [name]
  |   |   |   +--rw span:remote-span?    empty

```

RPCs None

Actions None

brocade-system

Description	Provides a data model for system-related information. It provides a custom RPC for returning the system up-time.
Top-level containers	None
External augmentations	None
RPCs	<p>Custom RPCs defined in this module follow.</p> <pre> +---x get-system-uptime +--ro input +--ro rbridge-id? common-def:rbridge-id-type +--ro output +--ro show-system-uptime [rbridge-id] +--ro rbridge-id common-def:rbridge-id-type +--ro days? common-def:time-interval-day +--ro hours? common-def:time-interval-hour +--ro minutes? common-def:time-interval-minute +--ro seconds? common-def:time-interval-sec +--ro cmd-error? string </pre>
Actions	None

brocade-system-monitor

Description Provides a data model for configuring monitoring thresholds for field-replaceable units (FRUs) and for configuring Fabric Watch e-mail alerts. When a threshold is breached or when an FRU is inserted or removed, a RASlog message is generated. Using this module, you can configure the marginal threshold and down threshold values for the following FRUs:

- Fans
- Power supplies
- Chassis ID (CID) card
- Each Small Form-Factor Pluggable (SFP) media interface
- Compact flash
- Management Module (MM)
- Line cards
- Switch Fabric Module (SFM)

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-system-monitor
  +--rw system-monitor
  |   +--rw fan
  |   |   +--rw threshold
  |   |   |   +--rw marginal-threshold?   uint32
  |   |   |   +--rw down-threshold?     uint32
  |   |   +--rw alert
  |   |       +--rw state?   supported-state
  |   |       +--rw action?  supported-actions
  |   +--rw power
  |   |   +--rw threshold
  |   |   |   +--rw marginal-threshold?   uint32
  |   |   |   +--rw down-threshold?     uint32
  |   |   +--rw alert
  |   |       +--rw state?   supported-state
  |   |       +--rw action?  supported-actions
  |   +--rw temp
  |   |   +--rw threshold
  |   |   |   +--rw marginal-threshold?   uint32
  |   |   |   +--rw down-threshold?     uint32
  |   +--rw cid-card
  |   |   +--rw threshold
  |   |   |   +--rw marginal-threshold?   uint32
  |   |   |   +--rw down-threshold?     uint32
  |   |   +--rw alert
  |   |       +--rw state?   supported-state
  |   |       +--rw action?  supported-actions
  |   +--rw sfp
  |   |   +--rw alert
  |   |       +--rw state?   sfp-supported-state
  |   |       +--rw action?  supported-actions
  |   +--rw compact-flash
  |   |   +--rw threshold
  |   |   |   +--rw marginal-threshold?   uint32
  |   |   |   +--rw down-threshold?     uint32
  |   +--rw MM
  |   |   +--rw threshold

```

```

| |     +--rw marginal-threshold?  uint32
| |     +--rw down-threshold?     uint32
| +--rw LineCard
| |     +--rw threshold
| | |     +--rw marginal-threshold?  uint32
| | |     +--rw down-threshold?     uint32
| |     +--rw alert
| | |     +--rw state?               supported-state
| | |     +--rw action?             supported-actions
| +--rw SFM
| |     +--rw threshold
| | |     +--rw marginal-threshold?  uint32
| | |     +--rw down-threshold?     uint32
+--rw system-monitor-mail
+--rw fru
| +--rw enable?                    empty
| +--rw email-list [email]
| +--rw email                      string
+--rw sfp
| +--rw enable?                    empty
| +--rw email-list [email]
| +--rw email                      string
+--rw security
| +--rw enable?                    empty
| +--rw email-list [email]
| +--rw email                      string
+--rw interface
| +--rw enable?                    empty
| +--rw email-list [email]
| +--rw email                      string
+--rw relay [host-ip]
+--rw host-ip                      inet:host
+--rw domain-name?                 string

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
+--rw rbridge-id [rbridge-id]
+--rw system-monitor:system-monitor
| +--rw system-monitor:fan
| | +--rw system-monitor:threshold
| | | +--rw system-monitor:marginal-threshold?  uint32
| | | +--rw system-monitor:down-threshold?     uint32
| | +--rw system-monitor:alert
| | | +--rw system-monitor:state?               supported-state
| | | +--rw system-monitor:action?             supported-actions
+--rw system-monitor:power
| +--rw system-monitor:threshold
| | +--rw system-monitor:marginal-threshold?  uint32
| | +--rw system-monitor:down-threshold?     uint32
| +--rw system-monitor:alert
| | +--rw system-monitor:state?               supported-state
| | +--rw system-monitor:action?             supported-actions
+--rw system-monitor:temp
| +--rw system-monitor:threshold
| | +--rw system-monitor:marginal-threshold?  uint32
| | +--rw system-monitor:down-threshold?     uint32
+--rw system-monitor:cid-card
| +--rw system-monitor:threshold
| | +--rw system-monitor:marginal-threshold?  uint32

```



```

| | | +--rw system-monitor:down-threshold?      uint32
| | +--rw system-monitor:alert
| | | +--rw system-monitor:state?      supported-state
| | | +--rw system-monitor:action?    supported-actions
+--rw system-monitor:sfp
| | +--rw system-monitor:alert
| | | +--rw system-monitor:state?      sfp-supported-state
| | | +--rw system-monitor:action?    supported-actions
+--rw system-monitor:compact-flash
| | +--rw system-monitor:threshold
| | | +--rw system-monitor:marginal-threshold?  uint32
| | | +--rw system-monitor:down-threshold?    uint32
+--rw system-monitor:MM
| | +--rw system-monitor:threshold
| | | +--rw system-monitor:marginal-threshold?  uint32
| | | +--rw system-monitor:down-threshold?    uint32
+--rw system-monitor:LineCard
| | +--rw system-monitor:threshold
| | | +--rw system-monitor:marginal-threshold?  uint32
| | | +--rw system-monitor:down-threshold?    uint32
| | +--rw system-monitor:alert
| | | +--rw system-monitor:state?      supported-state
| | | +--rw system-monitor:action?    supported-actions
+--rw system-monitor:SFM
| | +--rw system-monitor:threshold
| | | +--rw system-monitor:marginal-threshold?  uint32
| | | +--rw system-monitor:down-threshold?    uint32

```

RPCs None

Actions None

brocade-system-monitor-ext

Description Provides a data model for returning system monitor data.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw system-monitor-extensions:system
```

RPCs Custom RPCs defined in this module follow.

```
+---x show-system-monitor
  +--ro input
  |   +--ro rbridge-id?   common-def:rbridge-id-all-type
  +--ro output
  |   +--ro switch-status
  |   |   +--ro rbridge-id-out?   common-def:rbridge-id-type
  |   |   +--ro switch-name?     string
  |   |   +--ro switch-ip?      inet:ip-address
  |   |   +--ro report-time?    ietfyang:date-and-time
  |   |   +--ro switch-state?   system-monitor-health-state-enum
  |   |   +--ro switch-state-reason? string
  |   |   +--ro component-status
  |   |   |   +--ro component-name? string
  |   |   |   +--ro component-state? system-monitor-health-state-enum
  |   +--ro port-status
  |   |   +--ro port-area?   uint32
  |   |   +--ro port-name?  string
  |   |   +--ro port-state? system-monitor-port-state-enum
```

Actions Proprietary actions defined in this module follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw system-monitor-extensions:system
  |   |   +--ro system-monitor-extensions:monitor
  |   |   +--ro system-monitor-extensions:input
  |   |   +--ro system-monitor-extensions:rbridge-id?
  |   +--ro system-monitor-extensions:output
  |   +--ro system-monitor-extensions:switch-status
  |   +--ro system-monitor-extensions:rbridge-id-out?
  |   +--ro system-monitor-extensions:switch-name?   string
  |   +--ro system-monitor-extensions:switch-ip?
  |   +--ro system-monitor-extensions:report-time?
  |   +--ro system-monitor-extensions:switch-state?
  |   +--ro system-monitor-extensions:component-status
  |   |   +--ro system-monitor-extensions:component-name? string
```

```
      | | | +--ro system-monitor-extensions:component-state?  
system-monitor-health-state-enum  
      | | | +--ro system-monitor-extensions:faulty-port  
      | | | +--ro system-monitor-extensions:port-name? string
```

brocade-terminal

Description Provides a data model for managing CLI session features such as timeout.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-terminal
  +--rw terminal-cfg
    +--rw line [sessionid]
      +--rw sessionid      terminal-type
      +--rw exec-timeout? uint32
```

External augmentations None

RPCs None

Actions None

brocade-threshold-monitor

Description Provides a data model monitoring the following components by alerting the user when thresholds are exceeded:

- CPU usage
- 1, 10, and 40 Gigabit Ethernet interfaces
- Memory usage
- Security parameters, including Telnet violations and login violations

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-threshold-monitor
  +--rw threshold-monitor-hidden
    +--rw threshold-monitor
      +--rw sfp
        | +--rw apply?      supported-config
        | +--rw pause?     empty
        | +--rw policy [policy_name]
        |   +--rw policy_name string
        |   +--rw area [type area_value]
        |     +--rw type      enumeration
        |     +--rw area_value enumeration
        |     +--rw threshold
        |       | +--rw high-threshold? int32
        |       | +--rw low-threshold?  int32
        |       | +--rw buffer?         int32
        |       +--rw alert
        |         +--rw above
        |           | +--rw above-highthresh-action? supported-actions
        |           +--rw below
        |             +--rw below-highthresh-action? supported-actions
        |             +--rw below-lowthresh-action?  supported-actions
      +--rw security
        | +--rw apply?      supported-config
        | +--rw pause?     empty
        | +--rw policy [sec_policy_name]
        |   +--rw sec_policy_name string
        |   +--rw area [sec_area_value]
        |     +--rw sec_area_value enumeration
        |     +--rw timebase?      supported-timebase
        |     +--rw threshold
        |       | +--rw sec-high-threshold? int32
        |       | +--rw sec-low-threshold?  int32
        |       | +--rw sec-buffer?         int32
        |       +--rw alert
        |         +--rw above
        |           | +--rw sec-above-highthresh-action? supported-actions
        |           +--rw below
        |             +--rw sec-below-highthresh-action? supported-actions
        |             +--rw sec-below-lowthresh-action?  supported-actions
      +--rw Cpu
        | +--rw poll?      uint32
        | +--rw retry?     uint32
        | +--rw limit?     uint32
        | +--rw actions?   enumeration
      +--rw Memory
  
```

```

|   +--rw poll?          uint32
|   +--rw retry?         uint32
|   +--rw limit?         uint32
|   +--rw high-limit?   uint32
|   +--rw low-limit?    uint32
|   +--rw actions?      enumeration
+--rw interface
  +--rw apply?          supported-config
  +--rw pause?          empty
  +--rw policy [policy_name]
    +--rw policy_name   string
    +--rw area [type area_value]
      +--rw type         enumeration
      +--rw area_value   enumeration
      +--rw threshold
        | +--rw timebase_value? supported-timebase
        | +--rw high-threshold?  int32
        | +--rw low-threshold?   int32
        | +--rw buffer?          int32
      +--rw alert
        +--rw above
          | +--rw above-highthresh-action? int-supported-actions
          | +--rw above-lowthresh-action?  supported-actions
        +--rw below
          +--rw below-highthresh-action? supported-actions
          +--rw below-lowthresh-action?  supported-actions

```

External augmentations

Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw threshold-monitor:threshold-monitor
      +--rw threshold-monitor:sfp
        | +--rw threshold-monitor:apply? supported-config
        | +--rw threshold-monitor:pause? empty
        | +--rw threshold-monitor:policy [policy_name]
        |   +--rw threshold-monitor:policy_name string
        |   +--rw threshold-monitor:area [type area_value]
        |     +--rw threshold-monitor:type enumeration
        |     +--rw threshold-monitor:area_value enumeration
        |     +--rw threshold-monitor:threshold
        |       | +--rw threshold-monitor:high-threshold? int32
        |       | +--rw threshold-monitor:low-threshold? int32
        |       | +--rw threshold-monitor:buffer? int32
        |     +--rw threshold-monitor:alert
        |       +--rw threshold-monitor:above
        |         | +--rw threshold-monitor:above-highthresh-action?
supported-actions
          | +--rw threshold-monitor:below
          |   +--rw threshold-monitor:below-highthresh-action?
supported-actions
            | +--rw threshold-monitor:below-lowthresh-action?
supported-actions
      +--rw threshold-monitor:security
        | +--rw threshold-monitor:apply? supported-config
        | +--rw threshold-monitor:pause? empty
        | +--rw threshold-monitor:policy [sec_policy_name]
        |   +--rw threshold-monitor:sec_policy_name string
        |   +--rw threshold-monitor:area [sec_area_value]
        |     +--rw threshold-monitor:sec_area_value enumeration

```

```

|           +--rw threshold-monitor:timebase?           supported-timebase
|           +--rw threshold-monitor:threshold
|           |   +--rw threshold-monitor:sec-high-threshold?   int32
|           |   +--rw threshold-monitor:sec-low-threshold?   int32
|           |   +--rw threshold-monitor:sec-buffer?           int32
|           +--rw threshold-monitor:alert
|           |   +--rw threshold-monitor:above
|           |   |   +--rw threshold-monitor:sec-above-highthresh-action?
supported-actions
|           |   +--rw threshold-monitor:below
|           |   |   +--rw threshold-monitor:sec-below-highthresh-action?
supported-actions
|           |   +--rw threshold-monitor:sec-below-lowthresh-action?
supported-actions
+--rw threshold-monitor:Cpu
|   +--rw threshold-monitor:poll?           uint32
|   +--rw threshold-monitor:retry?         uint32
|   +--rw threshold-monitor:limit?         uint32
|   +--rw threshold-monitor:actions?       enumeration
+--rw threshold-monitor:Memory
|   +--rw threshold-monitor:poll?           uint32
|   +--rw threshold-monitor:retry?         uint32
|   +--rw threshold-monitor:limit?         uint32
|   +--rw threshold-monitor:high-limit?    uint32
|   +--rw threshold-monitor:low-limit?     uint32
|   +--rw threshold-monitor:actions?       enumeration
+--rw threshold-monitor:interface
+--rw threshold-monitor:apply?             supported-config
+--rw threshold-monitor:pause?             empty
+--rw threshold-monitor:policy [policy_name]
+--rw threshold-monitor:policy_name       string
+--rw threshold-monitor:area [type area_value]
+--rw threshold-monitor:type               enumeration
+--rw threshold-monitor:area_value         enumeration
+--rw threshold-monitor:threshold
|   +--rw threshold-monitor:timebase_value? supported-timebase
|   +--rw threshold-monitor:high-threshold? int32
|   +--rw threshold-monitor:low-threshold?  int32
|   +--rw threshold-monitor:buffer?        int32
+--rw threshold-monitor:alert
+--rw threshold-monitor:above
|   +--rw threshold-monitor:above-highthresh-action?
int-supported-actions
|   +--rw threshold-monitor:above-lowthresh-action?
supported-actions
+--rw threshold-monitor:below
+--rw threshold-monitor:below-highthresh-action?
supported-actions
+--rw threshold-monitor:below-lowthresh-action?
supported-actions

```

RPCs None

Actions None

brocade-threshold-monitor-ext

Description Provides a data model for returning threshold monitor data.

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw defaults
  |   |   +--rw threshold-monitor-extensions:threshold
```

RPCs None

Actions Proprietary actions defined in this module follow.

```
module: brocade-common-def
  +--rw show
  |   +--rw defaults
  |   |   +--rw threshold-monitor-extensions:threshold
  |   |   |   +--ro threshold-monitor-extensions:sfp
  |   |   |   |   +--ro threshold-monitor-extensions:input          sfp-type
  |   |   |   |   |   +--ro threshold-monitor-extensions:type
  |   |   |   |   |   +--ro threshold-monitor-extensions:interface
  |   |   |   |   |   |   +--ro threshold-monitor-extensions:input
  |   |   |   |   |   |   +--ro threshold-monitor-extensions:type    enumeration
  |   |   |   |   |   +--ro threshold-monitor-extensions:security
```

Show default threshold and alert values for SFP:

```
module: brocade-common-def
  +--rw show
  |   +--rw defaults
  |   |   +--rw threshold-monitor-extensions:threshold
  |   |   |   +--ro threshold-monitor-extensions:sfp
  |   |   |   |   +--ro threshold-monitor-extensions:input          sfp-type
  |   |   |   |   |   +--ro threshold-monitor-extensions:type
```

Show default threshold and alert values for interface:

```
module: brocade-common-def
  +--rw show
  |   +--rw defaults
  |   |   +--rw threshold-monitor-extensions:threshold
  |   |   |   +--ro threshold-monitor-extensions:interface
  |   |   |   |   +--ro threshold-monitor-extensions:input          enumeration
  |   |   |   |   |   +--ro threshold-monitor-extensions:type
```

Display default threshold and alert values for security:

```
module: brocade-common-def
  +--rw show
  |   +--rw defaults
  |   |   +--rw threshold-monitor-extensions:threshold
  |   |   |   +--ro threshold-monitor-extensions:security
```


brocade-trilloam

Description Provides a data model for managing commands that provide Operations, Administration, and Maintenance support (OAM) of Transparent Interconnection of Lots of Links (TRILL). Specifically, it provides custom RPCs for initiating a Layer 2 traceroute and for returning the traceroute results.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-trilloam
  +--rw trilloam
```

External augmentations None

RPCs Custom RPCs defined in this module follow.

```
+---x l2traceroute
  | +--ro input
  | | +--ro src-mac          mac:mac-address-type
  | | +--ro dest-mac         mac:mac-address-type
  | | +--ro vlan-id          interface:vlan-type
  | | +--ro rbridge-id       common-def:rbridge-id-type
  | | +--ro (protocolType)?
  | | | +--:(IP)
  | | | | +--ro src-ip          inet:ipv4-address
  | | | | +--ro dest-ip         inet:ipv4-address
  | | | | +--ro l4protocol       enumeration
  | | | | +--ro l4-src-port      inet:port-number
  | | | | +--ro l4-dest-port     inet:port-number
  | | | +--:(FCoE)
  | | +--ro output
  | | | +--ro session-id       uint32
  | | | +--ro reason           string
+---x l2traceroute-result
  +--ro input
  | +--ro session-id          uint32
  +--ro output
  | +--ro l2-hop-results
  | | +--ro l2-hop
  | | | +--ro rbridge-id?      common-def:rbridge-id-type
  | | | +--ro ingress
  | | | | +--ro interface-type? enumeration
  | | | | +--ro interface-name? union
  | | | +--ro egress
  | | | | +--ro interface-type? enumeration
  | | | | +--ro interface-name? union
  | | | +--ro roundtriptime?  common-def:time-interval-musec
  +--ro l2traceroutedone     boolean
  +--ro reason                string
```

Actions Proprietary actions defined in this module follow.

```
module: brocade-trilloam
  +--rw trilloam
  | +--ro l2traceroute
  | | +--ro input
```

brocade-tunnels

Description This management module is an instrumentation to manage tunnels configuration.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-tunnels
  +--rw nsx-controller [name]
  |   +--rw name          nvp-controller-name-type
  |   +--rw connection-addr
  |   |   +--rw address?  inet:ip-address
  |   |   +--rw port?    uint32
  |   |   +--rw method?  enumeration
  |   +--rw reconnect-interval?  uint32
  |   +--rw activate?      empty
  +--rw overlay-gateway [name]
  |   +--rw name          overlay-gw-name-type
  |   +--rw attach
  |   |   +--rw rbridge-id
  |   |   |   +--rw rb-add?    comn:ui32-range
  |   |   |   +--rw rb-remove? comn:ui32-range
  |   |   +--rw vlan [vid mac]
  |   |   |   +--rw vid      uint32
  |   |   |   +--rw mac     mac-address-type
  |   +--rw ip
  |   |   +--rw interface
  |   |   |   +--rw ve
  |   |   |   |   +--rw ve-id?          intf:ve-type
  |   |   |   |   +--rw vrrp-extended-group?  vrrp:vrid-type
  |   +--rw enable
  |   |   +--rw statistics
  |   |   |   +--rw stats-direction?  direction-type
  |   |   |   +--rw vlan-action?      enumeration
  |   |   |   +--rw vlan-list?       vlan-range-type
  |   +--rw monitor [session]
  |   |   +--rw session          span:session-type
  |   |   +--rw direction?      direction-type
  |   |   +--rw remote-endpoint? union
  |   |   +--rw vlan-leaf?      enumeration
  |   |   +--rw vlan-add-remove? enumeration
  |   |   +--rw vlan-range?     vlan-range-type
  |   +--rw activate?  empty

```

External augmentations None

RPCs None

Actions None

brocade-udld

Description This management module is an instrumentation to manage UDLD protocol configuration.

Glossary of the terms used:

- PDU - Protocol Data Unit. In the context of this module PDU refers to Layer2 frame transmitted or received by UDLD protocol.
- UDLD - UniDirectional Link Detection

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw protocol
  |   +--rw udld:udld?
  |   |   +--rw udld:hello?          uint32
  |   |   +--rw udld:multiplier?    uint32
  |   |   +--rw udld:shutdown?      empty
  |
  module: brocade-interface
    +--rw interface
    |   +--rw gigabitethernet [name]
    |   |   +--rw udld:udld
    |   |   |   +--rw udld:udld-enable?  empty
    |
  module: brocade-interface
    +--rw interface
    |   +--rw tengigabitethernet [name]
    |   |   +--rw udld:udld
    |   |   |   +--rw udld:udld-enable?  empty
    |
  module: brocade-interface
    +--rw interface
    |   +--rw fortygigabitethernet [name]
    |   |   +--rw udld:udld
    |   |   |   +--rw udld:udld-enable?  empty
    |
  module: brocade-interface
    +--rw interface
    |   +--rw hundredgigabitethernet [name]
    |   |   +--rw udld:udld
    |   |   |   +--rw udld:udld-enable?  empty
  
```

RPCs None

Actions None

brocade-vcs

Description Provides a data model for managing the Brocade VCS fabric.

VCS fabric refers to the ability of a group of physical Ethernet switches, interconnected in an arbitrary way using the regular front-end data ports, to appear as one unified and transparent Ethernet switching service to the external network. The network that connects these individual switches is referred to as the *fabric*. The group of physical Ethernet switches in the fabric is referred to as the *cluster*.

The cluster behaves like a logical switch to the external network.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-vcs
  +--rw vcsmode
  |   +--rw vcs-mode          boolean
  |   +--rw vcs-cluster-mode  boolean
  +--rw local-node
  |   +--rw swbd-number      uint32
  +--rw vcs
  |   +--rw virtual
  |   |   +--rw ip
  |   |   |   +--rw address?  common-def:ipv4-address-prefix-type
  +--rw virtual-fabric
  |   +--rw vfab-enable?     empty
```

External augmentations None

RPCs Custom RPCs defined in this module follow.

```
+---x get-last-config-update-time
  |   +--ro output
  |   |   +--ro last-config-update-time?  uint64
+---x show-vcs
  |   +--ro output
  |   |   +--ro principal-switch-wwn?      string
  |   |   +--ro co-ordinator-wwn?         string
  |   |   +--ro vcs-cluster-type-info?    vcs-cluster-type
  |   |   +--ro vcs-guid?                 string
  |   |   +--ro virtual-ip-address?       string
  |   |   +--ro total-nodes-in-cluster?   uint16
  |   |   +--ro nodes-disconnected-from-cluster?  uint16
  |   |   +--ro cluster-generic-status?    string
  |   |   +--ro cluster-specific-status?   string
  |   |   +--ro vcs-nodes
  |   |   |   +--ro vcs-node-info
  |   |   |   |   +--ro node-num?          uint16
  |   |   |   |   +--ro node-serial-num?   string
  |   |   |   |   +--ro node-condition?    string
  |   |   |   |   +--ro node-status?       string
  |   |   |   |   +--ro node-hw-sync-state? node-hw-sync-state-type
  |   |   |   |   +--ro node-vcs-mode?    string
  |   |   |   |   +--ro node-vcs-id?      uint16
  |   |   |   |   +--ro node-rbridge-id?  uint16
  |   |   |   |   +--ro node-is-principal? boolean
  |   |   |   |   +--ro co-ordinator?     boolean
  |   |   |   |   +--ro node-switch-mac?  yang:mac-address
```

```

|         +--ro node-switch-wnn?           string
|         +--ro switch-fcf-mac?           yang:mac-address
|         +--ro node-internal-ip-address? inet:ipv4-address
|         +--ro node-public-ip-addresses
|         |   +--ro node-public-ip-address? inet:ipv4-address
|         +--ro node-public-ipv6-addresses
|         |   +--ro node-public-ipv6-address? inet:ipv6-address
|         +--ro firmware-version?        string
|         +--ro node-swbd-number?         int32
|         +--ro node-switchname?         string
|         +--ro node-state?              node-state-type
|         +--ro node-fabric-state?       string
+---x get-vcs-details
|   +--ro output
|     +--ro vcs-details
|       +--ro principal-switch-wnn?      string
|       +--ro co-ordinator-wnn?         string
|       +--ro local-switch-wnn?         string
|       +--ro node-vcs-mode?             boolean
|       +--ro node-vcs-type?            vcs-cluster-type
|       +--ro node-vcs-id?              uint32
+---x vcs-rbridge-context
|   +--ro input
|     +--ro rbridge-id?                  uint16
+---x no-vcs-rbridge-context
+---x get-last-config-update-time-for-xpaths
|   +--ro input
|     |   +--ro xpath-strings [xpath-string]
|     |   +--ro xpath-string   string
|   +--ro output
|     +--ro last-config-update-time-for-xpaths [xpath-string]
|     +--ro xpath-string           string
|     +--ro last-config-update-time? uint64

```

Actions None

brocade-vlan

Description Provides a data model for managing VLAN classifiers.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-vlan
  +--rw vlan
    +--rw classifier
      | +--rw rule [ruleid]
      | | +--rw ruleid uint32
      | | +--rw (class-type)?
      | | | +--:(mac)
      | | | | +--rw mac
      | | | | | +--rw address? vmac-address-type
      | | | +--:(proto)
      | | | +--rw proto
      | | | | +--rw proto-val? union
      | | | | +--rw encap? enumeration
      | +--rw group [groupid oper rule-name ruleid]
      | +--rw groupid uint32
      | +--rw oper rule-opp-type
      | +--rw rule-name rule-name-type
      | +--rw ruleid uint32
    +--rw dot1q
      +--rw tag
        +--rw native? empty
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
    | +--rw gigabitethernet [name]
    | | +--rw brocade-vlan:vlan
    | | | +--rw brocade-vlan:classifier
    | | | +--rw brocade-vlan:activate
    | | | +--rw brocade-vlan:group [groupid vlan-name vlan]
    | | | | +--rw brocade-vlan:groupid uint32
    | | | | +--rw brocade-vlan:vlan-name enumeration
    | | | +--rw brocade-vlan:vlan interface:vlan-type
  
```

```

module: brocade-interface
  +--rw interface
    | +--rw tengigabitethernet [name]
    | | +--rw brocade-vlan:vlan
    | | | +--rw brocade-vlan:classifier
    | | | +--rw brocade-vlan:activate
    | | | +--rw brocade-vlan:group [groupid vlan-name vlan]
    | | | | +--rw brocade-vlan:groupid uint32
    | | | | +--rw brocade-vlan:vlan-name enumeration
    | | | +--rw brocade-vlan:vlan interface:vlan-type
  
```

```

module: brocade-interface
  +--rw interface
    | +--rw fortygigabitethernet [name]
    | | +--rw brocade-vlan:vlan
    | | | +--rw brocade-vlan:classifier
    | | | +--rw brocade-vlan:activate
    | | | +--rw brocade-vlan:group [groupid vlan-name vlan]
  
```

2 brocade-vlan

```

| | |          +--rw brocade-vlan:groupid      uint32
| | |          +--rw brocade-vlan:vlan-name   enumeration
| | |          +--rw brocade-vlan:vlan       interface:vlan-type

module: brocade-interface
+--rw interface
| +--rw hundredgigabitethernet [name]
| | +--rw brocade-vlan:vlan
| | | +--rw brocade-vlan:classifier
| | | +--rw brocade-vlan:activate
| | | +--rw brocade-vlan:group [groupid vlan-name vlan]
| | | +--rw brocade-vlan:groupid      uint32
| | | +--rw brocade-vlan:vlan-name   enumeration
| | | +--rw brocade-vlan:vlan       interface:vlan-type

module: brocade-interface
+--rw interface
| +--rw port-channel [name]
| | +--rw brocade-vlan:vlan
| | | +--rw brocade-vlan:classifier
| | | +--rw brocade-vlan:activate
| | | +--rw brocade-vlan:group [groupid vlan-name vlan]
| | | +--rw brocade-vlan:groupid      uint32
| | | +--rw brocade-vlan:vlan-name   enumeration
| | | +--rw brocade-vlan:vlan       interface:vlan-type
```

RPCs None

Actions None

brocade-vrf

Description This module manages Virtual Routing and Forwarding (VRF).

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw vrf:vrf [vrf-name]
      | +--rw vrf:vrf-name          common-def:vrf-name
      | +--rw vrf:route-distiguisher? rd-type
      | +--rw vrf:route-target [action target-community]
      | | +--rw vrf:action          enumeration
      | | +--rw vrf:target-community rt-type
      | +--rw vrf:address-family
      | | +--rw vrf:ipv4 [max-route]
      | | | +--rw vrf:max-route      uint32
      | | | +--rw vrf:action          enumeration
      | | | +--rw vrf:target-community rt-type

```

RPCs None

Actions None

brocade-vrrp

Description Provides a data model for configuring the Virtual Router Redundancy Protocol (VRRP). Use this module to enable VRRP globally, and to configure and enable VRRP on specific interfaces to share workload and provide router redundancy.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```
module: brocade-vrrp
  +--rw protocol-vrrp
    +--rw protocol
```

External augmentations Nodes that augment other modules and their subtrees follow.

```
module: brocade-rbridge
  +--rw rbridge-id [rbridge-id]
    +--rw brocade-interface:protocol
      | +--rw vrrp:hide-vrrp-holder
      |   +--rw vrrp:vrrp?          empty
      |   +--rw vrrp:vrrp-extended? empty
    +--rw brocade-interface:interface
      | +--rw brocade-interface:ve [name]
      | | +--rw vrrp:vrrp [vrid]
      | | | +--rw vrrp:vrid          vrid-type
      | | | +--rw vrrp:virtual-ip [virtual-ipaddr]
      | | | | +--rw vrrp:virtual-ipaddr inet:ipv4-address
      | | | +--rw vrrp:track
      | | | | +--rw vrrp:interface [interface-type interface-name]
      | | | | | +--rw vrrp:interface-type track-iftyp
      | | | | | +--rw vrrp:interface-name track-ifname
      | | | | | +--rw vrrp:track-priority? uint8
      | | | | +--rw vrrp:advertisement-interval? uint32
      | | | | +--rw vrrp:enable?          empty
      | | | | +--rw vrrp:hold-time?       uint32
      | | | | +--rw vrrp:preempt-mode?    empty
      | | | | +--rw vrrp:priority?       uint8
      | | | | +--rw vrrp:description?    string
      | | | +--rw vrrp:vrrpe [vrid]
      | | | | +--rw vrrp:vrid          vrid-type
      | | | | +--rw vrrp:virtual-mac
      | | | | | +--rw vrrp:vmac?      empty
      | | | | +--rw vrrp:virtual-ip [virtual-ipaddr]
      | | | | | +--rw vrrp:virtual-ipaddr inet:ipv4-address
      | | | | +--rw vrrp:track
      | | | | | +--rw vrrp:interface [interface-type interface-name]
      | | | | | | +--rw vrrp:interface-type track-iftyp
      | | | | | | +--rw vrrp:interface-name track-ifname
      | | | | | | +--rw vrrp:track-priority? uint8
      | | | | +--rw vrrp:advertisement-interval? uint32
      | | | | +--rw vrrp:enable?          empty
      | | | | +--rw vrrp:hold-time?       uint32
      | | | | +--rw vrrp:preempt-mode?    empty
      | | | | +--rw vrrp:priority?       uint8
      | | | | +--rw vrrp:description?    string
      | | | | +--rw vrrp:advertise-backup? empty
      | | | | +--rw vrrp:vrrpe-garp-timer? uint32
      | | | | +--rw vrrp:backup-advertisement-interval? uint32
      | | | | +--rw vrrp:short-path-forwarding
      | | | | +--rw vrrp:basic?          empty
```

```

| |          +--rw vrrp:revert-priority?  uint8
module: brocade-interface
+--rw interface
| +--rw gigabitethernet [name]
| | +--rw vrrp:vrrp [vrid]
| | | +--rw vrrp:vrid                                vrid-type
| | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | +--rw vrrp:virtual-ipaddr  inet:ipv4-address
| | | +--rw vrrp:track
| | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | +--rw vrrp:interface-type  track-iftype
| | | | | +--rw vrrp:interface-name  track-ifname
| | | | | +--rw vrrp:track-priority?  uint8
| | | +--rw vrrp:advertisement-interval?  uint32
| | | +--rw vrrp:enable?                  empty
| | | +--rw vrrp:hold-time?              uint32
| | | +--rw vrrp:preempt-mode?           empty
| | | +--rw vrrp:priority?               uint8
| | | +--rw vrrp:description?           string
| | +--rw vrrp:vrrpe [vrid]
| | | +--rw vrrp:vrid                                vrid-type
| | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | +--rw vrrp:virtual-ipaddr  inet:ipv4-address
| | | +--rw vrrp:track
| | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | +--rw vrrp:interface-type  track-iftype
| | | | | +--rw vrrp:interface-name  track-ifname
| | | | | +--rw vrrp:track-priority?  uint8
| | | +--rw vrrp:advertisement-interval?  uint32
| | | +--rw vrrp:enable?                  empty
| | | +--rw vrrp:hold-time?              uint32
| | | +--rw vrrp:preempt-mode?           empty
| | | +--rw vrrp:priority?               uint8
| | | +--rw vrrp:description?           string
| | | +--rw vrrp:advertise-backup?       empty
| | | +--rw vrrp:vrrpe-garp-timer?      uint32
| | | +--rw vrrp:backup-advertisement-interval?  uint32
| | | +--rw vrrp:short-path-forwarding
| | | | +--rw vrrp:basic?                empty
| | | | +--rw vrrp:revert-priority?     uint8

```

```

module: brocade-interface
+--rw interface
| +--rw tengigabitethernet [name]
| | +--rw vrrp:vrrp [vrid]
| | | +--rw vrrp:vrid                                vrid-type
| | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | +--rw vrrp:virtual-ipaddr  inet:ipv4-address
| | | +--rw vrrp:track
| | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | +--rw vrrp:interface-type  track-iftype
| | | | | +--rw vrrp:interface-name  track-ifname
| | | | | +--rw vrrp:track-priority?  uint8
| | | +--rw vrrp:advertisement-interval?  uint32
| | | +--rw vrrp:enable?                  empty
| | | +--rw vrrp:hold-time?              uint32
| | | +--rw vrrp:preempt-mode?           empty
| | | +--rw vrrp:priority?               uint8
| | | +--rw vrrp:description?           string

```

```

| | +--rw vrrp:vrrpe [vrid]
| | | +--rw vrrp:vrid                                vrid-type
| | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | +--rw vrrp:virtual-ipaddr    inet:ipv4-address
| | | +--rw vrrp:track
| | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | +--rw vrrp:interface-type    track-iftype
| | | | | +--rw vrrp:interface-name    track-ifname
| | | | | +--rw vrrp:track-priority?   uint8
| | | +--rw vrrp:advertisement-interval?   uint32
| | | +--rw vrrp:enable?                   empty
| | | +--rw vrrp:hold-time?                 uint32
| | | +--rw vrrp:preempt-mode?              empty
| | | +--rw vrrp:priority?                  uint8
| | | +--rw vrrp:description?              string
| | | +--rw vrrp:advertise-backup?          empty
| | | +--rw vrrp:vrrpe-garp-timer?         uint32
| | | +--rw vrrp:backup-advertisement-interval? uint32
| | | +--rw vrrp:short-path-forwarding
| | | | +--rw vrrp:basic?                   empty
| | | | +--rw vrrp:revert-priority?        uint8
|
| module: brocade-interface
| +--rw interface
| | +--rw fortygigabitethernet [name]
| | | +--rw vrrp:vrrp [vrid]
| | | | +--rw vrrp:vrid                                vrid-type
| | | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | | +--rw vrrp:virtual-ipaddr    inet:ipv4-address
| | | | +--rw vrrp:track
| | | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | | +--rw vrrp:interface-type    track-iftype
| | | | | | +--rw vrrp:interface-name    track-ifname
| | | | | | +--rw vrrp:track-priority?   uint8
| | | | +--rw vrrp:advertisement-interval?   uint32
| | | | +--rw vrrp:enable?                   empty
| | | | +--rw vrrp:hold-time?                 uint32
| | | | +--rw vrrp:preempt-mode?              empty
| | | | +--rw vrrp:priority?                  uint8
| | | | +--rw vrrp:description?              string
| | | +--rw vrrp:vrrpe [vrid]
| | | | +--rw vrrp:vrid                                vrid-type
| | | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | | +--rw vrrp:virtual-ipaddr    inet:ipv4-address
| | | | +--rw vrrp:track
| | | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | | +--rw vrrp:interface-type    track-iftype
| | | | | | +--rw vrrp:interface-name    track-ifname
| | | | | | +--rw vrrp:track-priority?   uint8
| | | | +--rw vrrp:advertisement-interval?   uint32
| | | | +--rw vrrp:enable?                   empty
| | | | +--rw vrrp:hold-time?                 uint32
| | | | +--rw vrrp:preempt-mode?              empty
| | | | +--rw vrrp:priority?                  uint8
| | | | +--rw vrrp:description?              string
| | | | +--rw vrrp:advertise-backup?          empty
| | | | +--rw vrrp:vrrpe-garp-timer?         uint32
| | | | +--rw vrrp:backup-advertisement-interval? uint32
| | | | +--rw vrrp:short-path-forwarding
| | | | | +--rw vrrp:basic?                   empty

```

```

| | | +--rw vrrp:revert-priority? uint8
module: brocade-interface
+--rw interface
| +--rw hundredgigabitethernet [name]
| | +--rw vrrp:vrrp [vrid]
| | | +--rw vrrp:vrid vrid-type
| | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | +--rw vrrp:virtual-ipaddr inet:ipv4-address
| | | +--rw vrrp:track
| | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | +--rw vrrp:interface-type track-iftype
| | | | | +--rw vrrp:interface-name track-ifname
| | | | | +--rw vrrp:track-priority? uint8
| | | +--rw vrrp:advertisement-interval? uint32
| | | +--rw vrrp:enable? empty
| | | +--rw vrrp:hold-time? uint32
| | | +--rw vrrp:preempt-mode? empty
| | | +--rw vrrp:priority? uint8
| | | +--rw vrrp:description? string
| | +--rw vrrp:vrrpe [vrid]
| | | +--rw vrrp:vrid vrid-type
| | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | +--rw vrrp:virtual-ipaddr inet:ipv4-address
| | | +--rw vrrp:track
| | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | +--rw vrrp:interface-type track-iftype
| | | | | +--rw vrrp:interface-name track-ifname
| | | | | +--rw vrrp:track-priority? uint8
| | | +--rw vrrp:advertisement-interval? uint32
| | | +--rw vrrp:enable? empty
| | | +--rw vrrp:hold-time? uint32
| | | +--rw vrrp:preempt-mode? empty
| | | +--rw vrrp:priority? uint8
| | | +--rw vrrp:description? string
| | | +--rw vrrp:advertise-backup? empty
| | | +--rw vrrp:vrrpe-garp-timer? uint32
| | | +--rw vrrp:backup-advertisement-interval? uint32
| | | +--rw vrrp:short-path-forwarding
| | | | +--rw vrrp:basic? empty
| | | | +--rw vrrp:revert-priority? uint8
module: brocade-interface
+--rw interface-vlan
| +--rw interface
| | +--rw ve [name]
| | | +--rw vrrp:vrrp [vrid]
| | | | +--rw vrrp:vrid vrid-type
| | | | +--rw vrrp:virtual-ip [virtual-ipaddr]
| | | | | +--rw vrrp:virtual-ipaddr inet:ipv4-address
| | | | +--rw vrrp:track
| | | | | +--rw vrrp:interface [interface-type interface-name]
| | | | | | +--rw vrrp:interface-type track-iftype
| | | | | | +--rw vrrp:interface-name track-ifname
| | | | | | +--rw vrrp:track-priority? uint8
| | | | +--rw vrrp:advertisement-interval? uint32
| | | | +--rw vrrp:enable? empty
| | | | +--rw vrrp:hold-time? uint32
| | | | +--rw vrrp:preempt-mode? empty
| | | | +--rw vrrp:priority? uint8

```

```

|   +--rw vrrp:description?                string
+--rw vrrp:vrrpe [vrid]
|   +--rw vrrp:vrid                          vrid-type
|   +--rw vrrp:virtual-ip [virtual-ipaddr]
|   |   +--rw vrrp:virtual-ipaddr          inet:ipv4-address
+--rw vrrp:track
|   +--rw vrrp:interface [interface-type interface-name]
|   |   +--rw vrrp:interface-type          track-iftyp
|   |   +--rw vrrp:interface-name          track-ifname
|   |   +--rw vrrp:track-priority?         uint8
+--rw vrrp:advertisement-interval?         uint32
+--rw vrrp:enable?                          empty
+--rw vrrp:hold-time?                        uint32
+--rw vrrp:preempt-mode?                     empty
+--rw vrrp:priority?                          uint8
+--rw vrrp:description?                       string
+--rw vrrp:advertise-backup?                   empty
+--rw vrrp:vrrpe-garp-timer?                   uint32
+--rw vrrp:backup-advertisement-interval?     uint32
+--rw vrrp:short-path-forwarding
|   +--rw vrrp:basic?                          empty
|   +--rw vrrp:revert-priority?                 uint8

module: brocade-interface
+--rw interface
|   +--rw port-channel [name]
|   |   +--rw vrrp:hide-vrrp-holer
|   |   |   +--rw vrrp:vrrp [vrid]
|   |   |   |   +--rw vrrp:vrid                          vrid-type
|   |   |   |   +--rw vrrp:virtual-ip [virtual-ipaddr]
|   |   |   |   |   +--rw vrrp:virtual-ipaddr          inet:ipv4-address
|   |   |   |   +--rw vrrp:track
|   |   |   |   |   +--rw vrrp:interface [interface-type interface-name]
|   |   |   |   |   |   +--rw vrrp:interface-type          track-iftyp
|   |   |   |   |   |   +--rw vrrp:interface-name          track-ifname
|   |   |   |   |   |   +--rw vrrp:track-priority?         uint8
|   |   |   |   +--rw vrrp:advertisement-interval?         uint32
|   |   |   |   +--rw vrrp:enable?                          empty
|   |   |   |   +--rw vrrp:hold-time?                        uint32
|   |   |   |   +--rw vrrp:preempt-mode?                     empty
|   |   |   |   +--rw vrrp:priority?                          uint8
|   |   |   |   +--rw vrrp:description?                       string
|   |   +--rw vrrp:vrrpe [vrid]
|   |   |   +--rw vrrp:vrid                          vrid-type
|   |   |   +--rw vrrp:virtual-ip [virtual-ipaddr]
|   |   |   |   +--rw vrrp:virtual-ipaddr          inet:ipv4-address
|   |   |   +--rw vrrp:track
|   |   |   |   +--rw vrrp:interface [interface-type interface-name]
|   |   |   |   |   +--rw vrrp:interface-type          track-iftyp
|   |   |   |   |   +--rw vrrp:interface-name          track-ifname
|   |   |   |   |   +--rw vrrp:track-priority?         uint8
|   |   |   +--rw vrrp:advertisement-interval?         uint32
|   |   |   +--rw vrrp:enable?                          empty
|   |   |   +--rw vrrp:hold-time?                        uint32
|   |   |   +--rw vrrp:preempt-mode?                     empty
|   |   |   +--rw vrrp:priority?                          uint8
|   |   |   +--rw vrrp:description?                       string
|   |   |   +--rw vrrp:advertise-backup?                   empty
|   |   |   +--rw vrrp:vrrpe-garp-timer?                   uint32
|   |   |   +--rw vrrp:backup-advertisement-interval?     uint32

```

```
    | | |   +---rw vrrp:short-path-forwarding
    | | |   +---rw vrrp:basic?          empty
    | | |   +---rw vrrp:revert-priority? uint8
```

RPCs None

Actions None

brocade-vswitch

Description This management submodule is an instrumentation to manage Virtual switch features.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-vswitch
  +--rw vcenter [id]
    +--rw id          common-def:name-string32
    +--rw credentials
      | +--rw url?    vcenter-url
      | +--rw username? string
      | +--rw password? string
    +--rw activate?  empty
    +--rw interval?  uint32
    +--rw discovery
      +--rw ignore-delete-all-response
        +--rw ignore-value?  uint32
        +--rw always?        empty
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-common-def
  +--rw show
    | +--rw vswitch:vnetwork
  
```

RPCs Custom RPCs defined in this module follow.

```

+---x get-vnetwork-hosts
| +--ro input
| | +--ro vcenter          string
| | +--ro datacenter?     string
| | +--ro name?           string
| | +--ro last-rcvd-instance? uint32
| +--ro output
| | +--ro vnetwork-hosts
| | | +--ro name?          string
| | | +--ro vmnic?         string
| | | +--ro datacenter?    string
| | | +--ro mac?           yang:mac-address
| | | +--ro vswitch?      string
| | | +--ro interface-type? enumeration
| | | +--ro interface-name? union
| | +--ro has-more?       boolean
| | +--ro instance-id?    uint32
+---x get-vnetwork-vms
| +--ro input
| | +--ro name?           string
| | +--ro vcenter        string
| | +--ro datacenter?    string
| | +--ro last-rcvd-instance? uint32
| +--ro output
| | +--ro vnetwork-vms
| | | +--ro name?          string
| | | +--ro mac?           yang:mac-address
| | | +--ro datacenter?    string
| | | +--ro ip?            inet:ip-address
| | | +--ro host-nn?       string
| | +--ro has-more?       boolean
  
```



```

|     +--ro instance-id?      uint32
+---x get-vnetwork-dvpgs
|   +--ro input
|   |   +--ro name?          string
|   |   +--ro vcenter        string
|   |   +--ro datacenter?    string
|   |   +--ro last-rcvd-instance?  uint32
|   +--ro output
|   |   +--ro vnetwork-dvpgs
|   |   |   +--ro name?      string
|   |   |   +--ro datacenter? string
|   |   |   +--ro dvs-nn?    string
|   |   |   +--ro vlan?      string
|   |   +--ro has-more?      boolean
|   |   +--ro instance-id?    uint32
+---x get-vnetwork-dvs
|   +--ro input
|   |   +--ro name?          string
|   |   +--ro vcenter        string
|   |   +--ro datacenter?    string
|   |   +--ro last-rcvd-instance?  uint32
|   +--ro output
|   |   +--ro vnetwork-dvs
|   |   |   +--ro name?      string
|   |   |   +--ro host?      string
|   |   |   +--ro datacenter? string
|   |   |   +--ro pnic?      string
|   |   |   +--ro interface-type? enumeration
|   |   |   +--ro interface-name? union
|   |   +--ro has-more?      boolean
|   |   +--ro instance-id?    uint32
+---x get-vnetwork-vswitches
|   +--ro input
|   |   +--ro name?          string
|   |   +--ro vcenter        string
|   |   +--ro datacenter?    string
|   |   +--ro last-rcvd-instance?  uint32
|   +--ro output
|   |   +--ro vnetwork-vswitches
|   |   |   +--ro name?      string
|   |   |   +--ro host?      string
|   |   |   +--ro datacenter? string
|   |   |   +--ro pnic?      string
|   |   |   +--ro interface-type? enumeration
|   |   |   +--ro interface-name? union
|   |   +--ro has-more?      boolean
|   |   +--ro instance-id?    uint32
+---x get-vnetwork-portgroups
|   +--ro input
|   |   +--ro name?          string
|   |   +--ro vcenter        string
|   |   +--ro datacenter?    string
|   |   +--ro last-rcvd-instance?  uint32
|   +--ro output
|   |   +--ro vnetwork-pgs
|   |   |   +--ro name?      string
|   |   |   +--ro datacenter? string
|   |   |   +--ro vs-nn?    string
|   |   |   +--ro vlan?      string
|   |   |   +--ro host-nn?   string

```

```

|     +--ro has-more?         boolean
|     +--ro instance-id?     uint32
+---x get-vmpolicy-macaddr
|     +--ro input
|     |     +--ro mac?         yang:mac-address
|     |     +--ro vcenter      string
|     |     +--ro datacenter?  string
|     |     +--ro last-rcvd-instance?  uint32
+--ro output
|     +--ro vmpolicy-macaddr
|     |     +--ro mac?         yang:mac-address
|     |     +--ro name?        string
|     |     +--ro datacenter?  string
|     |     +--ro dvpg-nn?     string
|     |     +--ro port-nn?     string
|     |     +--ro port-prof?   string
+--ro has-more?         boolean
+--ro instance-id?     uint32

```

Actions Proprietary actions defined in this module follow.

Display virtual infrastructure information.

```

module: brocade-common-def
+--rw show
|   +--rw vswitch:vnetwork
|   |   +--ro vswitch:datacenter
|   |   |   +--ro vswitch:input
|   |   |   |   +--ro vswitch:vcenter      string
|   |   |   |   +--ro (op)?
|   |   |   |   +---:(id)
|   |   |   |   +--ro vswitch:id?         string

```

Display discovered hosts.

```

module: brocade-common-def
+--rw show
|   +--rw vswitch:vnetwork
|   |   +--ro vswitch:hosts
|   |   |   +--ro vswitch:input
|   |   |   |   +--ro vswitch:vcenter      string
|   |   |   |   +--ro vswitch:datacenter?  string
|   |   |   |   +--ro (op)?
|   |   |   |   +---:(name)
|   |   |   |   +--ro vswitch:name?        string
|   |   |   +--ro vswitch:output
|   |   |   |   +--ro vswitch:vnetwork-hosts
|   |   |   |   |   +--ro vswitch:name?        string
|   |   |   |   |   +--ro vswitch:vmnic?       string
|   |   |   |   |   +--ro vswitch:mac?        yang:mac-address
|   |   |   |   |   +--ro vswitch:vswitch?    string
|   |   |   |   |   +--ro vswitch:interface-type?  enumeration
|   |   |   |   |   +--ro vswitch:interface-name?  union

```

Display discovered VMs.

```

module: brocade-common-def
+--rw show
|   +--rw vswitch:vnetwork
|   |   +--ro vswitch:vms
|   |   |   +--ro vswitch:input
|   |   |   |   +--ro vswitch:vcenter      string

```

```

| | | | +--ro vswitch:datacenter? string
| | | | +--ro (op)?
| | | | |   +---:(name)
| | | | |   +--ro vswitch:name? string
| | | | +--ro vswitch:output
| | | | +--ro vswitch:vnetwork-vms
| | | | |   +--ro vswitch:name? string
| | | | |   +--ro vswitch:mac? yang:mac-address
| | | | |   +--ro vswitch:ip? inet:ip-address
| | | | |   +--ro vswitch:host-nn? string

```

Display discovered distributed virtual port-groups.

```

module: brocade-common-def
+--rw show
| +--rw vswitch:vnetwork
| | +--ro vswitch:dvpgs
| | | +--ro vswitch:input
| | | | +--ro vswitch:vcenter string
| | | | +--ro vswitch:datacenter? string
| | | | +--ro (op)?
| | | | |   +---:(name)
| | | | |   +--ro vswitch:name? string
| | | | +--ro vswitch:output
| | | | +--ro vswitch:vnetwork-dvpgs
| | | | |   +--ro vswitch:name? string
| | | | |   +--ro vswitch:dvs-nn? string
| | | | |   +--ro vswitch:vlan? string

```

Display discovered distributed virtual switches.

```

module: brocade-common-def
+--rw show
| +--rw vswitch:vnetwork
| | +--ro vswitch:dvs
| | | +--ro vswitch:input
| | | | +--ro vswitch:vcenter string
| | | | +--ro vswitch:datacenter? string
| | | | +--ro (op)?
| | | | |   +---:(name)
| | | | |   +--ro vswitch:name? string
| | | | +--ro vswitch:output
| | | | +--ro vswitch:vnetwork-dvs
| | | | |   +--ro vswitch:name? string
| | | | |   +--ro vswitch:host? string
| | | | |   +--ro vswitch:pnic? string
| | | | |   +--ro vswitch:interface-type? enumeration
| | | | |   +--ro vswitch:interface-name? union

```

Display discovered standard virtual switches.

```

module: brocade-common-def
+--rw show
| +--rw vswitch:vnetwork
| | +--ro vswitch:vss
| | | +--ro vswitch:input
| | | | +--ro vswitch:vcenter string
| | | | +--ro vswitch:datacenter? string
| | | | +--ro (op)?
| | | | |   +---:(name)
| | | | |   +--ro vswitch:name? string
| | | | +--ro vswitch:output

```

```

| | | +--ro vswitch:vnetwork-vswitches
| | | +--ro vswitch:name? string
| | | +--ro vswitch:host? string
| | | +--ro vswitch:pnict? string
| | | +--ro vswitch:interface-type? enumeration
| | | +--ro vswitch:interface-name? union

```

Display discovered standard port-groups.

```

module: brocade-common-def
+--rw show
| +--rw vswitch:vnetwork
| | +--ro vswitch:pgs
| | | +--ro vswitch:input
| | | | +--ro vswitch:vcenter string
| | | | +--ro vswitch:datacenter? string
| | | | +--ro (op)?
| | | | | +--:(name)
| | | | | +--ro vswitch:name? string
| | | +--ro vswitch:output
| | | | +--ro vswitch:vnetwork-pgs
| | | | | +--ro vswitch:name? string
| | | | | +--ro vswitch:vs-nn? string
| | | | | +--ro vswitch:vlan? string
| | | | | +--ro vswitch:host-nn? string

```

Display **vswitch/vmknics** to portgroup to port-profile association

```

module: brocade-common-def
+--rw show
| +--rw vswitch:vnetwork
| | +--rw vswitch:vmknics
| | | +--ro vswitch:macaddr
| | | | +--ro vswitch:input
| | | | | +--ro vswitch:vcenter string
| | | | | +--ro vswitch:datacenter? string
| | | | | +--ro (op)?
| | | | | | +--:(mac)
| | | | | | +--ro vswitch:mac? yang:mac-address
| | | +--ro vswitch:output
| | | | +--ro vswitch:vmknics-macaddr
| | | | | +--ro vswitch:mac? yang:mac-address
| | | | | +--ro vswitch:name? string
| | | | | +--ro vswitch:dvpkg-nn? string
| | | | | +--ro vswitch:port-nn? string
| | | | | +--ro vswitch:port-prof? string

```

brocade-xstp

Description Provides a data model for managing the Spanning Tree Protocols globally and for each interface. The model supports the following protocols:

- Spanning Tree Protocol (STP)
- Rapid STP
- Multiple Spanning Tree Protocol (MSTP)
- Per-VLAN Spanning Tree (PVST)
- Rapid PVST

Top-level containers None

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-interface
  +--rw interface
  |   +--rw gigabitEthernet [name]
  |   |   +--rw xstp:bpdu-drop
  |   |   |   +--rw xstp:enable?      empty
  |   |   |   +--rw xstp:direction?  enumeration
  |   |   +--rw xstp:tunnel
  |   |   |   +--rw xstp:tagged-ieee-bpdu?  empty
  |   |   +--rw xstp:spanning-tree
  |   |   |   +--rw xstp:autoedge?        empty
  |   |   |   +--rw xstp:cost?           uint32
  |   |   |   +--rw xstp:portfast
  |   |   |   |   +--rw xstp:portfastbasic?  empty
  |   |   |   |   +--rw xstp:bpdu-guard?    empty
  |   |   |   |   +--rw xstp:bpdu-filter?   empty
  |   |   |   +--rw xstp:edgeport
  |   |   |   |   +--rw xstp:edgeportbasic?  empty
  |   |   |   |   +--rw xstp:bpdu-guard?    empty
  |   |   |   |   +--rw xstp:bpdu-filter?   empty
  |   |   |   +--rw xstp:guard
  |   |   |   |   +--rw xstp:root?          empty
  |   |   |   +--rw xstp:hello-time?       uint32
  |   |   |   +--rw xstp:bpdu-mac?         enumeration
  |   |   |   +--rw xstp:link-type?        enumeration
  |   |   |   +--rw xstp:priority?         uint32
  |   |   |   +--rw xstp:restricted-role?   empty
  |   |   |   +--rw xstp:restricted-tcn?   empty
  |   |   |   +--rw xstp:shutdown?        empty
  |   |   |   +--rw xstp:vlan [id]
  |   |   |   |   +--rw xstp:id             uint32
  |   |   |   |   +--rw xstp:cost?         uint32
  |   |   |   |   +--rw xstp:priority?     uint32
  |   |   |   |   +--rw xstp:guard
  |   |   |   |   |   +--rw xstp:root?     empty
  |   |   |   +--rw xstp:instance [id]
  |   |   |   |   +--rw xstp:id             mstp-instance-type
  |   |   |   |   +--rw xstp:cost?         uint32
  |   |   |   |   +--rw xstp:priority?     uint32
  |   |   |   |   +--rw xstp:restricted-role?  empty
  |   |   |   |   +--rw xstp:restricted-tcn?  empty
  |   |   +--rw tengigabitEthernet [name]

```

```

+--rw xstp:bpdu-drop
|   +--rw xstp:enable?      empty
|   +--rw xstp:direction?  enumeration
+--rw xstp:tunnel
|   +--rw xstp:tagged-ieee-bpdu?  empty
+--rw xstp:spanning-tree
|   +--rw xstp:autoedge?      empty
|   +--rw xstp:cost?         uint32
|   +--rw xstp:portfast
|   |   +--rw xstp:portfastbasic?  empty
|   |   +--rw xstp:bpdu-guard?    empty
|   |   +--rw xstp:bpdu-filter?   empty
|   +--rw xstp:edgeport
|   |   +--rw xstp:edgeportbasic?  empty
|   |   +--rw xstp:bpdu-guard?    empty
|   |   +--rw xstp:bpdu-filter?   empty
|   +--rw xstp:guard
|   |   +--rw xstp:root?    empty
|   +--rw xstp:hello-time?    uint32
|   +--rw xstp:bpdu-mac?      enumeration
|   +--rw xstp:link-type?     enumeration
|   +--rw xstp:priority?      uint32
|   +--rw xstp:restricted-role?  empty
|   +--rw xstp:restricted-tcn?  empty
|   +--rw xstp:shutdown?      empty
|   +--rw xstp:vlan [id]
|   |   +--rw xstp:id          uint32
|   |   +--rw xstp:cost?      uint32
|   |   +--rw xstp:priority?  uint32
|   |   +--rw xstp:guard
|   |   |   +--rw xstp:root?  empty
+--rw xstp:instance [id]
|   +--rw xstp:id              mstp-instance-type
|   +--rw xstp:cost?          uint32
|   +--rw xstp:priority?      uint32
|   +--rw xstp:restricted-role?  empty
|   +--rw xstp:restricted-tcn?  empty
+--rw fortygigabitethernet [name]
|   +--rw xstp:bpdu-drop
|   |   +--rw xstp:enable?      empty
|   |   +--rw xstp:direction?  enumeration
+--rw xstp:tunnel
|   +--rw xstp:tagged-ieee-bpdu?  empty
+--rw xstp:spanning-tree
|   +--rw xstp:autoedge?      empty
|   +--rw xstp:cost?         uint32
|   +--rw xstp:portfast
|   |   +--rw xstp:portfastbasic?  empty
|   |   +--rw xstp:bpdu-guard?    empty
|   |   +--rw xstp:bpdu-filter?   empty
|   +--rw xstp:edgeport
|   |   +--rw xstp:edgeportbasic?  empty
|   |   +--rw xstp:bpdu-guard?    empty
|   |   +--rw xstp:bpdu-filter?   empty
|   +--rw xstp:guard
|   |   +--rw xstp:root?    empty
|   +--rw xstp:hello-time?    uint32
|   +--rw xstp:bpdu-mac?      enumeration
|   +--rw xstp:link-type?     enumeration
|   +--rw xstp:priority?      uint32

```

```

| | +--rw xstp:restricted-role?    empty
| | +--rw xstp:restricted-tcn?    empty
| | +--rw xstp:shutdown?         empty
| | +--rw xstp:vlan [id]
| | | +--rw xstp:id              uint32
| | | +--rw xstp:cost?          uint32
| | | +--rw xstp:priority?      uint32
| | | +--rw xstp:guard
| | | | +--rw xstp:root?        empty
| | +--rw xstp:instance [id]
| | | +--rw xstp:id              mstp-instance-type
| | | +--rw xstp:cost?          uint32
| | | +--rw xstp:priority?      uint32
| | | +--rw xstp:restricted-role? empty
| | | +--rw xstp:restricted-tcn? empty
+--rw hundredgigabitethernet [name]
| +--rw xstp:bpdu-drop
| | +--rw xstp:enable?          empty
| | +--rw xstp:direction?      enumeration
+--rw xstp:spanning-tree
| +--rw xstp:autoedge?         empty
| +--rw xstp:cost?             uint32
| +--rw xstp:portfast
| | +--rw xstp:portfastbasic?   empty
| | +--rw xstp:bpdu-guard?      empty
| | +--rw xstp:bpdu-filter?     empty
+--rw xstp:edgeport
| +--rw xstp:edgeportbasic?    empty
| +--rw xstp:bpdu-guard?      empty
| +--rw xstp:bpdu-filter?     empty
+--rw xstp:guard
| +--rw xstp:root?            empty
+--rw xstp:hello-time?         uint32
+--rw xstp:bpdu-mac?           enumeration
+--rw xstp:link-type?          enumeration
+--rw xstp:priority?           uint32
+--rw xstp:restricted-role?    empty
+--rw xstp:restricted-tcn?     empty
+--rw xstp:shutdown?          empty
+--rw xstp:vlan [id]
| +--rw xstp:id              uint32
| +--rw xstp:cost?          uint32
| +--rw xstp:priority?      uint32
| +--rw xstp:guard
| | +--rw xstp:root?        empty
+--rw xstp:instance [id]
| +--rw xstp:id              uint8
| +--rw xstp:cost?          uint32
| +--rw xstp:priority?      uint32
| +--rw xstp:restricted-role? empty
| +--rw xstp:restricted-tcn? empty
+--rw protocol
| +--rw xstp:spanning-tree
| | +--rw xstp:stp?
| | | +--rw xstp:description?    string
| | | +--rw xstp:bridge-priority? uint32
| | | +--rw xstp:error-disable-timeout
| | | | +--rw xstp:enable?      empty
| | | | +--rw xstp:interval?    uint32
| | +--rw xstp:forward-delay?    uint32

```

```

| +--rw xstp:max-age?                uint32
| +--rw xstp:port-channel
| | +--rw xstp:path-cost?            enumeration
| +--rw xstp:shutdown?               empty
| +--rw xstp:hello-time?             uint32
+--rw xstp:rstp?
| +--rw xstp:description?            string
| +--rw xstp:bridge-priority?        uint32
| +--rw xstp:error-disable-timeout
| | +--rw xstp:enable?               empty
| | +--rw xstp:interval?             uint32
| +--rw xstp:forward-delay?          uint32
| +--rw xstp:max-age?                uint32
| +--rw xstp:port-channel
| | +--rw xstp:path-cost?            enumeration
| +--rw xstp:shutdown?               empty
| +--rw xstp:hello-time?             uint32
| +--rw xstp:transmit-holdcount?     uint32
+--rw xstp:pvst?
| +--rw xstp:description?            string
| +--rw xstp:bridge-priority?        uint32
| +--rw xstp:error-disable-timeout
| | +--rw xstp:enable?               empty
| | +--rw xstp:interval?             uint32
| +--rw xstp:forward-delay?          uint32
| +--rw xstp:max-age?                uint32
| +--rw xstp:port-channel
| | +--rw xstp:path-cost?            enumeration
| +--rw xstp:shutdown?               empty
| +--rw xstp:hello-time?             uint32
| +--rw xstp:vlan [id]
| | +--rw xstp:id                    uint32
| | +--rw xstp:priority?              uint32
| | +--rw xstp:forward-delay?        uint32
| | +--rw xstp:max-age?              uint32
| | +--rw xstp:hello-time?           uint32
+--rw xstp:rpvst?
| +--rw xstp:description?            string
| +--rw xstp:bridge-priority?        uint32
| +--rw xstp:error-disable-timeout
| | +--rw xstp:enable?               empty
| | +--rw xstp:interval?             uint32
| +--rw xstp:forward-delay?          uint32
| +--rw xstp:max-age?                uint32
| +--rw xstp:port-channel
| | +--rw xstp:path-cost?            enumeration
| +--rw xstp:shutdown?               empty
| +--rw xstp:hello-time?             uint32
| +--rw xstp:vlan [id]
| | +--rw xstp:id                    uint32
| | +--rw xstp:priority?              uint32
| | +--rw xstp:forward-delay?        uint32
| | +--rw xstp:max-age?              uint32
| | +--rw xstp:hello-time?           uint32
| +--rw xstp:transmit-holdcount?     uint32
+--rw xstp:mstp?
| +--rw xstp:description?            string
| +--rw xstp:bridge-priority?        uint32
| +--rw xstp:error-disable-timeout
| | +--rw xstp:enable?               empty

```



```

    |   +--rw xstp:interval?   uint32
+--rw xstp:forward-delay?   uint32
+--rw xstp:max-age?         uint32
+--rw xstp:port-channel
    |   +--rw xstp:path-cost?  enumeration
+--rw xstp:shutdown?       empty
+--rw xstp:hello-time?     uint32
+--rw xstp:cisco-interopability?  enumeration
+--rw xstp:instance [id]
    |   +--rw xstp:id          mstp-instance-type
    |   +--rw xstp:vlan?      xstp-ui32-vlan-range
    |   +--rw xstp:priority?  uint32
+--rw xstp:region?         string
+--rw xstp:revision?      uint16
+--rw xstp:max-hops?      uint32
+--rw xstp:transmit-holdcount?  uint32
+--rw port-channel [name]
    |   +--rw xstp:bpdu-drop
    |   |   +--rw xstp:enable?    empty
    |   |   +--rw xstp:direction?  enumeration
    |   +--rw xstp:tunnel
    |   |   +--rw xstp:tagged-ieee-bpdu?  empty
+--rw xstp:spanning-tree
    |   +--rw xstp:autoedge?      empty
    |   +--rw xstp:cost?         uint32
    |   +--rw xstp:portfast
    |   |   +--rw xstp:portfastbasic?  empty
    |   |   +--rw xstp:bpdu-guard?    empty
    |   |   +--rw xstp:bpdu-filter?   empty
+--rw xstp:edgeport
    |   +--rw xstp:edgeportbasic?  empty
    |   +--rw xstp:bpdu-guard?    empty
    |   +--rw xstp:bpdu-filter?   empty
+--rw xstp:guard
    |   +--rw xstp:root?          empty
+--rw xstp:hello-time?         uint32
+--rw xstp:bpdu-mac?           enumeration
+--rw xstp:link-type?          enumeration
+--rw xstp:priority?           uint32
+--rw xstp:restricted-role?    empty
+--rw xstp:restricted-tcn?     empty
+--rw xstp:shutdown?           empty
+--rw xstp:vlan [id]
    |   +--rw xstp:id            uint32
    |   +--rw xstp:cost?        uint32
    |   +--rw xstp:priority?    uint32
    |   +--rw xstp:guard
    |   |   +--rw xstp:root?     empty
+--rw xstp:instance [id]
    |   +--rw xstp:id            mstp-instance-type
    |   +--rw xstp:cost?        uint32
    |   +--rw xstp:priority?    uint32
    |   +--rw xstp:restricted-role?  empty
    |   +--rw xstp:restricted-tcn?  empty
+--rw interface-vlan
    |   +--rw interface
    |   |   +--rw xstp:spanning-tree
    |   |   |   +--rw xstp:stp-shutdown?  empty

```

2 brocade-xstp

RPCs None

Actions None

brocade-xstp-ext

Description	Provides a data model for obtaining operational data about the Spanning Tree Protocol.
Top-level containers	None
External augmentations	None
RPCs	Custom RPCs defined in this module follow.

```

+---x get-stp-brief-info
|
|  +--ro input
|  |
|  |  +--ro (request-type)?
|  |  |
|  |  |  +---:(getnext-request)
|  |  |  |
|  |  |  |  +--ro last-rcvd-instance
|  |  |  |  |
|  |  |  |  |  +--ro instance-id?  uint32
|  |  |  |
|  |  |
|  |  +--ro output
|  |  |
|  |  |  +--ro spanning-tree-info
|  |  |  |
|  |  |  |  +--ro stp-mode?  stp-type
|  |  |  |  +--ro (spanning-tree-mode)?
|  |  |  |  |
|  |  |  |  |  +---:(stp)
|  |  |  |  |  |
|  |  |  |  |  |  +--ro stp
|  |  |  |  |  |  |
|  |  |  |  |  |  |  +--ro root-bridge
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  +--ro priority?  uint32
|  |  |  |  |  |  |  |  +--ro bridge-id?  bridge-id-type
|  |  |  |  |  |  |  |  +--ro hello-time?  uint32
|  |  |  |  |  |  |  |  +--ro max-age?  uint32
|  |  |  |  |  |  |  |  +--ro forward-delay?  uint32
|  |  |  |  |  |  |
|  |  |  |  |  |  +--ro bridge
|  |  |  |  |  |  |
|  |  |  |  |  |  |  +--ro priority?  uint32
|  |  |  |  |  |  |  +--ro bridge-id?  bridge-id-type
|  |  |  |  |  |  |  +--ro hello-time?  uint32
|  |  |  |  |  |  |  +--ro max-age?  uint32
|  |  |  |  |  |  |  +--ro forward-delay?  uint32
|  |  |  |  |  |
|  |  |  |  +--ro port
|  |  |  |  |
|  |  |  |  |  +--ro interface-type?  enumeration
|  |  |  |  |  +--ro interface-name?  union
|  |  |  |  |  +--ro spanningtree-enabled?  boolean
|  |  |  |  |  +--ro if-index?  uint64
|  |  |  |  |  +--ro interface-id?  uint64
|  |  |  |  |  +--ro if-role?  stp-port-role
|  |  |  |  |  +--ro if-state?  stp-port-state
|  |  |  |  |  +--ro external-path-cost?  uint32
|  |  |  |  |  +--ro internal-path-cost?  uint32
|  |  |  |  |  +--ro configured-path-cost?  uint32
|  |  |  |  |  +--ro designated-port-id?  uint64
|  |  |  |  |  +--ro port-priority?  uint32
|  |  |  |  |  +--ro designated-bridge-id?  bridge-id-type
|  |  |  |  |  +--ro port-hello-time?  uint32
|  |  |  |  |  +--ro forward-transitions-count?  uint32
|  |  |  |  |  +--ro received-stp-type?  stp-type
|  |  |  |  |  +--ro transmitted-stp-type?  stp-type
|  |  |  |  |  +--ro edge-port?  on-off-type
|  |  |  |  |  +--ro auto-edge?  yes-no-type
|  |  |  |  |  +--ro admin-edge?  yes-no-type
|  |  |  |  |  +--ro edge-delay?  uint32

```

```

    +--ro configured-root-guard?    on-off-type
    +--ro oper-root-guard?          on-off-type
    +--ro boundary-port?            yes-no-type
    +--ro oper-bpdu-guard?          on-off-type
    +--ro oper-bpdu-filter?         on-off-type
    +--ro link-type?                stp-link-type
    +--ro rx-bpdu-count?            uint64
    +--ro tx-bpdu-count?            uint64
+--:(rstp)
  +--ro rstp
    +--ro root-bridge
      | +--ro priority?              uint32
      | +--ro bridge-id?            bridge-id-type
      | +--ro hello-time?           uint32
      | +--ro max-age?              uint32
      | +--ro forward-delay?        uint32
    +--ro bridge
      | +--ro priority?              uint32
      | +--ro bridge-id?            bridge-id-type
      | +--ro hello-time?           uint32
      | +--ro max-age?              uint32
      | +--ro forward-delay?        uint32
    +--ro transmit-hold-count?      uint32
    +--ro migrate-time?              uint32
  +--ro port
    +--ro interface-type?           enumeration
    +--ro interface-name?           union
    +--ro spanningtree-enabled?     boolean
    +--ro if-index?                 uint64
    +--ro interface-id?             uint64
    +--ro if-role?                  stp-port-role
    +--ro if-state?                 stp-port-state
    +--ro external-path-cost?        uint32
    +--ro internal-path-cost?        uint32
    +--ro configured-path-cost?      uint32
    +--ro designated-port-id?        uint64
    +--ro port-priority?             uint32
    +--ro designated-bridge-id?      bridge-id-type
    +--ro port-hello-time?           uint32
    +--ro forward-transitions-count? uint32
    +--ro received-stp-type?         stp-type
    +--ro transmitted-stp-type?      stp-type
    +--ro edge-port?                 on-off-type
    +--ro auto-edge?                 yes-no-type
    +--ro admin-edge?                yes-no-type
    +--ro edge-delay?                uint32
    +--ro configured-root-guard?     on-off-type
    +--ro oper-root-guard?           on-off-type
    +--ro boundary-port?             yes-no-type
    +--ro oper-bpdu-guard?           on-off-type
    +--ro oper-bpdu-filter?          on-off-type
    +--ro link-type?                 stp-link-type
    +--ro rx-bpdu-count?             uint64
    +--ro tx-bpdu-count?             uint64
+--:(mstp)
  +--ro mstp
    +--ro root-bridge
      | +--ro priority?              uint32
      | +--ro bridge-id?            bridge-id-type
      | +--ro hello-time?           uint32

```

```

|   +--ro max-age?          uint32
|   +--ro forward-delay?   uint32
+--ro bridge
|   +--ro priority?        uint32
|   +--ro bridge-id?      bridge-id-type
|   +--ro hello-time?     uint32
|   +--ro max-age?        uint32
|   +--ro forward-delay?  uint32
+--ro transmit-hold-count? uint32
+--ro migrate-time?       uint32
+--ro port
  +--ro interface-type?    enumeration
  +--ro interface-name?    union
  +--ro spanningtree-enabled? boolean
  +--ro if-index?          uint64
  +--ro interface-id?      uint64
  +--ro if-role?           stp-port-role
  +--ro if-state?          stp-port-state
  +--ro external-path-cost? uint32
  +--ro internal-path-cost? uint32
  +--ro configured-path-cost? uint32
  +--ro designated-port-id? uint64
  +--ro port-priority?     uint32
  +--ro designated-bridge-id? bridge-id-type
  +--ro port-hello-time?   uint32
  +--ro forward-transitions-count? uint32
  +--ro received-stp-type? stp-type
  +--ro transmitted-stp-type? stp-type
  +--ro edge-port?         on-off-type
  +--ro auto-edge?         yes-no-type
  +--ro admin-edge?        yes-no-type
  +--ro edge-delay?        uint32
  +--ro configured-root-guard? on-off-type
  +--ro oper-root-guard?   on-off-type
  +--ro boundary-port?     yes-no-type
  +--ro oper-bpdu-guard?   on-off-type
  +--ro oper-bpdu-filter?  on-off-type
  +--ro link-type?         stp-link-type
  +--ro rx-bpdu-count?     uint64
  +--ro tx-bpdu-count?     uint64
+--:(pvstp)
  +--ro pvstp [vlan-id]
  +--ro vlan-id             interface:vlan-type
  +--ro root-bridge
  |   +--ro priority?        uint32
  |   +--ro bridge-id?      bridge-id-type
  |   +--ro hello-time?     uint32
  |   +--ro max-age?        uint32
  |   +--ro forward-delay?  uint32
  +--ro bridge
  |   +--ro priority?        uint32
  |   +--ro bridge-id?      bridge-id-type
  |   +--ro hello-time?     uint32
  |   +--ro max-age?        uint32
  |   +--ro forward-delay?  uint32
  +--ro transmit-hold-count? uint32
  +--ro migrate-time?       uint32
  +--ro port
  +--ro interface-type?    enumeration
  +--ro interface-name?    union

```

```

+--ro spanningtree-enabled?      boolean
+--ro if-index?                  uint64
+--ro interface-id?             uint64
+--ro if-role?                  stp-port-role
+--ro if-state?                 stp-port-state
+--ro external-path-cost?       uint32
+--ro internal-path-cost?       uint32
+--ro configured-path-cost?     uint32
+--ro designated-port-id?       uint64
+--ro port-priority?            uint32
+--ro designated-bridge-id?     bridge-id-type
+--ro port-hello-time?          uint32
+--ro forward-transitions-count? uint32
+--ro received-stp-type?        stp-type
+--ro transmitted-stp-type?     stp-type
+--ro edge-port?                on-off-type
+--ro auto-edge?                yes-no-type
+--ro admin-edge?               yes-no-type
+--ro edge-delay?               uint32
+--ro configured-root-guard?    on-off-type
+--ro oper-root-guard?          on-off-type
+--ro boundary-port?            yes-no-type
+--ro oper-bpdu-guard?          on-off-type
+--ro oper-bpdu-filter?         on-off-type
+--ro link-type?                stp-link-type
+--ro rx-bpdu-count?            uint64
+--ro tx-bpdu-count?            uint64
+--:(rpvstp)
+--ro rpvstp [vlan-id]
+--ro vlan-id                    interface:vlan-type
+--ro root-bridge
| +--ro priority?                uint32
| +--ro bridge-id?              bridge-id-type
| +--ro hello-time?             uint32
| +--ro max-age?                uint32
| +--ro forward-delay?          uint32
+--ro bridge
| +--ro priority?                uint32
| +--ro bridge-id?              bridge-id-type
| +--ro hello-time?             uint32
| +--ro max-age?                uint32
| +--ro forward-delay?          uint32
+--ro transmit-hold-count?      uint32
+--ro migrate-time?             uint32
+--ro port
+--ro interface-type?           enumeration
+--ro interface-name?           union
+--ro spanningtree-enabled?     boolean
+--ro if-index?                 uint64
+--ro interface-id?            uint64
+--ro if-role?                  stp-port-role
+--ro if-state?                 stp-port-state
+--ro external-path-cost?       uint32
+--ro internal-path-cost?       uint32
+--ro configured-path-cost?     uint32
+--ro designated-port-id?       uint64
+--ro port-priority?            uint32
+--ro designated-bridge-id?     bridge-id-type
+--ro port-hello-time?          uint32
+--ro forward-transitions-count? uint32

```

```

|         +--ro received-stp-type?          stp-type
|         +--ro transmitted-stp-type?       stp-type
|         +--ro edge-port?                  on-off-type
|         +--ro auto-edge?                  yes-no-type
|         +--ro admin-edge?                 yes-no-type
|         +--ro edge-delay?                 uint32
|         +--ro configured-root-guard?      on-off-type
|         +--ro oper-root-guard?            on-off-type
|         +--ro boundary-port?              yes-no-type
|         +--ro oper-bpdu-guard?            on-off-type
|         +--ro oper-bpdu-filter?           on-off-type
|         +--ro link-type?                  stp-link-type
|         +--ro rx-bpdu-count?              uint64
|         +--ro tx-bpdu-count?              uint64
|     +--ro has-more?                        boolean
|     +--ro last-instance
|         +--ro instance-id?                uint32
+---x get-stp-mst-detail
+--ro input
|   +--ro (request-type)?
|   |   +---:(getnext-request)
|   |   +--ro last-rcvd-instance
|   |   +--ro instance-id?                uint32
+--ro output
+--ro cist
|   +--ro cist-root-id?                    bridge-id-type
|   +--ro cist-bridge-id?                  bridge-id-type
|   +--ro cist-reg-root-id?                bridge-id-type
|   +--ro root-forward-delay?              uint32
|   +--ro hello-time?                      uint32
|   +--ro max-age?                         uint32
|   +--ro max-hops?                        uint32
|   +--ro migrate-time?                    uint32
+--ro vlans
|   +--ro vlan-id*                          interface:vlan-type
+--ro port
|   +--ro interface-type?                  enumeration
|   +--ro interface-name?                  union
|   +--ro spanningtree-enabled?            boolean
|   +--ro if-index?                        uint64
|   +--ro interface-id?                    uint64
|   +--ro if-role?                         stp-port-role
|   +--ro if-state?                        stp-port-state
|   +--ro external-path-cost?              uint32
|   +--ro internal-path-cost?              uint32
|   +--ro configured-path-cost?            uint32
|   +--ro designated-port-id?              uint64
|   +--ro port-priority?                   uint32
|   +--ro designated-bridge-id?            bridge-id-type
|   +--ro port-hello-time?                 uint32
|   +--ro forward-transitions-count?       uint32
|   +--ro received-stp-type?               stp-type
|   +--ro transmitted-stp-type?            stp-type
|   +--ro edge-port?                       on-off-type
|   +--ro auto-edge?                       yes-no-type
|   +--ro admin-edge?                       yes-no-type
|   +--ro edge-delay?                       uint32
|   +--ro configured-root-guard?           on-off-type
|   +--ro oper-root-guard?                 on-off-type
|   +--ro boundary-port?                   yes-no-type

```

```

|     +--ro oper-bpdu-guard?           on-off-type
|     +--ro oper-bpdu-filter?         on-off-type
|     +--ro link-type?                stp-link-type
|     +--ro rx-bpdu-count?            uint64
|     +--ro tx-bpdu-count?            uint64
+--ro msti [instance-id]
|     +--ro instance-id                uint32
|     +--ro msti-root-id?              bridge-id-type
|     +--ro msti-bridge-id?            bridge-id-type
|     +--ro msti-bridge-priority?      uint32
|     +--ro vlans
|     | +--ro vlan-id*                 interface:vlan-type
+--ro port
|     +--ro interface-type?            enumeration
|     +--ro interface-name?            union
|     +--ro spanningtree-enabled?      boolean
|     +--ro if-index?                  uint64
|     +--ro interface-id?              uint64
|     +--ro if-role?                   stp-port-role
|     +--ro if-state?                  stp-port-state
|     +--ro external-path-cost?        uint32
|     +--ro internal-path-cost?        uint32
|     +--ro configured-path-cost?      uint32
|     +--ro designated-port-id?        uint64
|     +--ro port-priority?              uint32
|     +--ro designated-bridge-id?      bridge-id-type
|     +--ro port-hello-time?           uint32
|     +--ro forward-transitions-count? uint32
|     +--ro received-stp-type?         stp-type
|     +--ro transmitted-stp-type?      stp-type
|     +--ro edge-port?                 on-off-type
|     +--ro auto-edge?                 yes-no-type
|     +--ro admin-edge?                 yes-no-type
|     +--ro edge-delay?                 uint32
|     +--ro configured-root-guard?     on-off-type
|     +--ro oper-root-guard?           on-off-type
|     +--ro boundary-port?             yes-no-type
|     +--ro oper-bpdu-guard?           on-off-type
|     +--ro oper-bpdu-filter?          on-off-type
|     +--ro link-type?                 stp-link-type
|     +--ro rx-bpdu-count?             uint64
|     +--ro tx-bpdu-count?             uint64
+--ro has-more?                         boolean
+--ro last-instance
|     +--ro instance-id?               uint32

```

Actions None

brocade-zone

Description Provides a data model for configuring zones and retrieving operational zoning information.

Top-level containers Top-level nodes and their subtree hierarchies follow.

```

module: brocade-zone
  +--rw zoning
    +--rw defined-configuration
      | +--rw cfg [cfg-name]
      | | +--rw cfg-name      string
      | | +--rw member-zone [zone-name]
      | |   +--rw zone-name   string
      | +--rw zone [zone-name]
      | | +--rw zone-name     string
      | | +--rw member-entry [entry-name]
      | |   +--rw entry-name  string
      | +--rw alias [alias-name]
      | | +--rw alias-name    string
      | | +--rw member-entry [alias-entry-name]
      | |   +--rw alias-entry-name  string
    +--rw enabled-configuration
      +--rw cfg-name?          string
      +--rw default-zone-access?  default-zone-access-type
      +--rw cfg-action?        cfg-action-type
  
```

External augmentations Nodes that augment other modules and their subtrees follow.

```

module: brocade-common-def
  +--rw show
  | +--rw brocade-zone:zoning
  
```

RPCs Custom RPCs defined in this module follow.

```

+---x show-zoning-enabled-configuration
  +--ro input
  | +--ro (request-type)?
  | | +--ro zone-name-pattern?  string
  | | +--ro last-rcvd-zone-name? string
  | +--ro (get-next-request)
  | +--ro last-rcvd-zone-name?  string
  +--ro output
  | +--ro enabled-configuration
  | | +--ro cfg-name?          string
  | | +--ro enabled-zone [zone-name]
  | | | +--ro zone-name      string
  | | | +--ro member-entry [entry-name]
  | | |   +--ro entry-name  string
  | | +--ro has-more?        boolean
  
```

Actions Proprietary actions defined in this module follow.

```

module: brocade-common-def
  +--rw show
  | +--rw brocade-zone:zoning
  | | +--ro brocade-zone:operation-info
  | | | +--ro brocade-zone:input
  | | | +--ro brocade-zone:output
  | | +--ro brocade-zone:db-max?      uint32
  
```

2 brocade-zone

```
|      +--ro brocade-zone:db-avail?          uint32  
|      +--ro brocade-zone:db-committed?      uint32  
|      +--ro brocade-zone:db-transaction?    uint32  
|      +--ro brocade-zone:transaction-token? uint32  
|      +--ro brocade-zone:last-zone-changed-timestamp? string  
|      +--ro brocade-zone:last-zone-committed-timestamp? string
```

Custom RPCs

Table 5 list the custom RPCs, their locations, and a brief synopsis.

TABLE 5 Custom RPCs

RPC name	Host module	Synopsis
activate-status	brocade-firmware	Returns firmware activation status.
bnacfgcmd	brocade-ras	Copies configuration data to and from the system
bnacfgcmd-status	brocade-ras	Returns the status of the last configuration command.
dad-status	brocade-firmware	Displays the current status of firmware download.
fcoe-get-interface	brocade-fcoe-ext	Returns operational state details for an FCoE interface.
fcoe-get-login	brocade-fcoe-ext	Returns the login information about FCoE end nodes that have logged in to the managed device.
fwdl-status	brocade-firmware	Returns the status of the firmware download operation.
get-arp	brocade-arp	Returns ARP entries of the managed entity.
get-interface-detail	brocade-interface-ext	Returns operational details of all the possible interfaces of the managed entity. Use this RPC to discover basic characteristics of all the interfaces in the system. Each sublayer below the internetwork layer of a network interface is considered to be an interface.
get-interface-switchport	brocade-interface-ext	Returns switch-port or Layer 2 characteristics of all the interfaces in the managed device.
get-ip-interface	brocade-interface-ext	Return brief details of all interfaces, loopback and VE interface details of particular managed entity. Phy interface details of particular managed entity cannot be given
get-last-config-update-time	brocade-vc	Returns the time stamp of the last configuration change done on the managed device.
get-last-config-update-time-for-xpaths	brocade-vc	Returns the time stamp of the last configuration change done on the managed device for Xpaths.
get-mac-acl-for-intf	brocade-mac-access-list	Returns information about the MAC ACL applied on the specified interfaces.

TABLE 5 Custom RPCs (Continued)

RPC name	Host module	Synopsis
get-mac-address-table	brocade-mac-address-table	Returns the MAC address table for a given MAC address.
get-media-detail	brocade-interface-ext	Returns the media properties of all the interfaces of the managed entity.
get-netconf-client-capabilities	brocade-netconf-ext	Returns the vendor information for all NETCONF clients.
get-port-channel-detail	brocade-lag	Returns link aggregation control configuration parameters for all the port-channels in the system.
get-portchannel-info-by-intf	brocade-lag	Returns link aggregation control configuration parameters for a given aggregation port in the system.
get-port-profile-for-intf	brocade-port-profile-ext	Returns the port-profiles applied on ports and port-channels.
get-port-profile-status	brocade-port-profile-ext	Returns the status of a port-profile.
get-stp-brief-info	brocade-xstp-ext	Returns Spanning Tree Protocol (STP) information.
get-stp-mst-detail	brocade-xstp-ext	Returns Multiple Spanning Tree Protocol (MSTP) details.
get-system-uptime	brocade-system	Returns the time since the managed entity was last reinitialized.
get-vcs-details	brocade-vcs	Retains detailed VCS fabric information.
get-vlan-brief	brocade-interface-ext	Returns operational data for a given VLAN and enumeration of all the interfaces belonging to this VLAN.
get-vmpolicy-macaddr	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output.
get-vnetwork-dvpgs	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output.
get-vnetwork-dvs	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output.
get-vnetwork-hosts	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output.
get-vnetwork-portgroups	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output.

TABLE 5 Custom RPCs (Continued)

RPC name	Host module	Synopsis
get-vnetwork-vms	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output.
get-vnetwork-vswitches	brocade-vswitch.yang	Takes vCenter name as mandatory input, datacenter name as optional input. All is not supported input anymore. Datacenter name added in output. Returns discovered virtual switches.
get-vmpolicy-macaddr	brocade-vswitch	Returns the associations among Virtual Network Interface Cards (VNICs) or Virtual Machine Kernet Network Interface Cards (VMKNICs), port-groups, and port-profiles.
get-vnetwork-dvpgs	brocade-vswitch	Returns discovered distributed virtual port-groups.
get-vnetwork-dvs	brocade-vswitch	Returns discovered distributed virtual switches.
get-vnetwork-hosts	brocade-vswitch	Returns discovered hosts.
get-vnetwork-portgroups	brocade-vswitch	Returns discovered port-groups.
get-vnetwork-vms	brocade-vswitch	Returns discovered virtual machines.
get-vnetwork-vswitches	brocade-vswitch	Returns discovered virtual switches.
l2traceroute	brocade-trilloam	Traces a TRILL route from a host source MAC address to a destination MAC address.
l2traceroute-result	brocade-trilloam	Returns the result of a TRILL traceroute.
logical-chassis-fwdl-sanity	brocade-firmware	Retrieves firmware download sanity check status.
logical-chassis-fwdl-status	brocade-firmware	Retrieves firmware activation status.
no-vcs-rbridge-context	brocade-vcs	Disables VCS Fabric mode.
show-clock	brocade-clock	Returns the date, time, and time zone.
show-fibrechannel-interface-info	brocade-fabric-service	Provides detailed information of Fibre Channel ports in the routing bridge.
show-firmware-version	brocade-firmware-ext	Returns firmware version information.
show-linkinfo	brocade-fabric-service	Returns details of all the links connected in the fabric.
show-ntp	brocade-ntp	Returns the active NTP server for the Brocade VCS fabric or specified switch.
show-portindex-interface-info	brocade-fabric-service	Returns the details of 10 Gb Ethernet and FCoE ports.
show-raslog	brocade-ras-ext	Returns RASlog entries.
show-support-save-status	brocade-ras-ext	Returns information about the status of a recent support save request.

TABLE 5 Custom RPCs (Continued)

RPC name	Host module	Synopsis
show-system-info	brocade-ras-ext	Returns the routing bridge ID and MAC address of the switch.
show-system-monitor	brocade-system-monitor-ext	Returns system status information.
show-vcs	brocade-vcs	Provides general VCS fabric information.
show-zoning-enabled-configuration	brocade-zone	Returns the current zoning configuration information
user-session-info	brocade-aaa-ext	Returns user role information.
vcs-rbridge-context	brocade-vcs	Sets VCS Fabric mode for a given routing bridge.

Actions

Table 6 list actions, their locations, and a brief description of its purpose.

TABLE 6 Actions

Action name	Host module	Node	Purpose
activate	brocade-fc-auth	secpolicy/action	Activates all the defined FC authorization policies.
activate	brocade-firmware	firmware	Activates the firmware download.
add	brocade-license	common-def:show/license	Displays the license keys.
add	brocade-license	license	Installs license keys.
all	brocade-fabric-service	common-def:show/fabric	Returns fabric information.
audit	brocade-distributedlog	common-def:show/log	Displays VCS fabric-related log information.
audit-ccm	brocade-distributedlog	common-def:show/log	Displays CCM log information.
auditlog	brocade-ras-ext	common-def:clear/logging	Clears the audit log.
auditlog	brocade-ras-ext	common-def:show/logging	Shows audit log information.
autoupload	brocade-ras-ext	common-def:show/autoupload	Shows autoupload configuration information.
brief	brocade-nameserver	common-def:show/:	This function is to get a list of devices, listed by FCID, that are stored in the Name Server database.
burninerrclear	brocade-diagnostics	diag	Clears the errors that are stored in the nonvolatile storage on the slot during the burn-in process.
burninerrshow	brocade-diagnostics	common-def:show	Check the error log.
burninstatus	brocade-diagnostics	common-def:show	Displays the status of last run system verification test.
chassis	brocade-beacon	beacon/disable	Disables the chassis beacon
chassis	brocade-beacon	beacon/enable	Enables the chassis beacon.
chassis	brocade-ras-ext	common-def:show/infra	Returns system information.
chassisreboot	brocade-ha	ha	Reboots the chassis.
clearerror	brocade-diagnostics	diag	Clears the diagnostics failure status.
clock	brocade-clock	clock-set-datetime	Sets the date and time.
clock	brocade-clock	clock-set-timezone	Sets the local time zone.
commit	brocade-firmware	firmware/download	Commits a firmware upgrade after evaluation.
cpu	brocade-ras-ext	common-def:show/infra/process	Lists processes by CPU usage.
cpu	brocade-ras	resource monitor	Lists processes by CPU usage.
dadstatus	brocade-firmware	common-def:show/dhcp-auto-deployment	Displays the current status of firmware download.
datacenter	brocade-vswitch	common-def:show/vnetwork	Shows discovered datacenters.

B Actions

TABLE 6 Actions (Continued)

Action name	Host module	Node	Purpose
description	brocade-ras-ext	rasman	Displays the details of the defined log modules.
detail	brocade-nameserver	common-def:show/:	Returns details about the configured name server.
dhchap	brocade-fc-auth	auth-secret	Configures authorization secret for DH-CHAP.
dhchap	brocade-fc-auth	common-def:no/fcsp/auth-secret	Deletes the authorization secret for DH-CHAP.
dhchap	brocade-fc-auth	common-def:show/fcsp/auth-secret	Return the device WWN for which a shared secret is configured.
dir	brocade-ras	system/usb	Displays the directory of a USB device.
disable	brocade-chassis	chassis	Disables the chassis.
disable	brocade-chassis	chassis/beacon	Disables the chassis beacon
disable	brocade-firmware	firmware/auto-sync	Disables the firmware download.
disable	brocade-ha	ha	Disables high availability.
disable	brocade-ras	system/autoupload	Disables automatic upload of support data.
dpod	brocade-license	common-def:show/enh-show-license-keys	Displays DPOD license information.
dump	brocade-ha	ha	Displays high availability status information.
dvpgs	brocade-vswitch	common-def:show/vnetwork	Returns information about virtual port-groups.
dvs	brocade-vswitch	common-def:show/vnetwork	Returns information about distributed virtual switches.
dvpgs	brocade-vswitch	common-def:show/vnetwork	Shows discovered distributed virtual port-groups.
dvs	brocade-vswitch	common-def:show/vnetwork	Shows discovered distributed virtual switches.
enable	brocade-chassis	chassis	Enables the chassis.
enable	brocade-chassis	chassis/beacon	Enables the chassis beacon
enable	brocade-firmware	firmware/auto-sync	Enables the firmware download.
enable	brocade-firmware	dhcp/auto-deployment	Enables auto-deployment of the firmware.
enable	brocade-ha	ha	Enables high availability.
enable	brocade-ras	system/autoupload	Enables automatic support data upload.
exec	brocade-diagnostics	fos	Runs native Fabric OS commands.
failover	brocade-ha	ha	Causes HA failover.
fan	brocade-ras-ext	common-def:show/infra/environment	Shows fan information.
fastboot	brocade-firmware	reboot	Reboots the control processor (CP), bypassing the power-on self-tests (POSTs)
features	brocade-firmware-ext	common-def:show/firmware	Returns firmware features.
firmware	brocade-firmware-ext	common-def:show/firmware	Shows firmware auto-sync status
firmwaredownloadhistory	brocade-firmware-ext	common-def:show/firmware	Returns a history of firmware downloads.
firmwaredownloadstatus	brocade-firmware-ext	common-def:show/firmware	Returns the firmware download status.

TABLE 6 Actions (Continued)

Action name	Host module	Node	Purpose
firmware-features	brocade-firmware-ext	common-def:show/firmware	Show firmware features.
ftp	brocade-firmware	firmware/download	Downloads firmware with FTP.
ftp	brocade-firmware	firmware/download/default-config	Downloads firmware with FTP.
ftp	brocade-firmware	firmware/download/logical-chassis	Downloads firmware with FTP for logical chassis.
ftp	brocade-firmware	firmware/download/logical-chassis/default-config	Downloads firmware with FTP for logical chassis.
ftp	brocade-ras	copy/support	Uploads support data to an FTP server.
gmsg	brocade-ras	auditlog	Generates an audit log message for an internal audit log test.
gmsg	brocade-ras	logtest/raslog	Generates a message for an internal RASlog test.
ha	brocade-ha	common-def:show/ha	Displays the HA state.
history	brocade-ras-ext	common-def:show/infra	Shows history information.
hosts	brocade-vswitch	common-def:show/vnetwork	Returns information about discovered hosts.
id	brocade-license	common-def:show/license	Returns license IDs.
info	brocade-ras-ext	common-def:show/infra/process	Shows system processes.
interactive	brocade-firmware	firmware/download	Downloads firmware interactively.
interface	brocade-beacon	beacon/disable	Disables the interface beacon.
interface	brocade-beacon	beacon/enable	Enables the interface beacon.
interface	brocade-threshold-monitor-ext	brocade-common-def:show/defaults/brocade-threshold-monitor-ext:threshold	Shows default threshold and alert values for interface.
inventory	brocade-ras-ext	infra-inventory	Displays the inventory details.
isl	brocade-fabric-service	common-def:show/fabric-service:fabric	Returns fabric ISL information.
islports	brocade-fabric-service	common-def:show/fabric-service:fabric	Returns fabric ISL port information.
l2traceroute	brocade-trilloam	trilloam	Traces a route between a source and destination MAC address.
ldapca	brocade-certutil	certutil/import	Imports the LDAP CA certificate.
ldapca	brocade-certutil	common-def:no/certutil	Deletes the LDAP CA certificate.
ldapcert	brocade-certutil	common-def:show/cert-util	Displays the LDAP CA certificate.
license	brocade-license	common-def:show/enh-show-license-keys	Displays license information.
linecard	brocade-linecard-management	common-def:show/linecardinfo	Displays line card information.
linkinfo	brocade-fabric-service	common-def:show/fabric-service:fabric	Returns fabric ISL link information.

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TABLE 6 Actions (Continued)

Action name	Host module	Node	Purpose
macaddr	brocade-vswitch	common-def:show/vnetwork/vmpolicy	Returns information about MAC address policies.
memory	brocade-ras-ext	common-def:show/infra/process	Lists processes by memory usage.
memory	brocade-ras	resource-monitor	Lists processes by memory usage.
message	brocade-ras-ext	rasman	Displays the details of the given raslog message ID.
mm	brocade-linecard-management	common-def:show/mminfor	Displays management module information.
module	brocade-ras-ext	rasman	Displays the details of the given ras module name.
modelname	brocade-Enclosure-show	common-def:show/enclosure	Displays the present slot-id of switch.
monitor	brocade-system-monitor-ext	common-def:show/system-monitor-extensions:system	Returns monitor switch status.
monitor	brocade-threshold-monitor-ext	common-def:show/threshold-monitor-extensions:system	Returns monitor switch error statistics on an interface.
multicast	brocade-fabric-service	fabric/route	Displays multicast routing information, includes the multicast tree, its root, priority, and so on. A multicast tree is a loop free tree consisting of all nodes in cluster. Usually, the node with lowest RBridge-ID becomes the root. BUM traffic is always forwarded on the multicast tree (regardless of VLAN ID)
neighbor-state	brocade-fabric-state	fabric/route	Displays the FSPF link state information of a node. A <i>full</i> state indicates FSPF link state database exchange is complete and that the link can be used while making routing decisions.
nodefind	brocade-nameserver	common-def:show/:	Displays nodes matching a specified WWN or PID.
off	brocade-ras	system/usb	Disables the USB device.
on	brocade-ras	system/usb	Enables the USB device.
operation-info	brocade-zone	common-def:show/zoning	Returns zone database size information and the time stamp of the last change.
pathinfo	brocade-fabric-service	fabric/route	Displays routing information and states along a path covering multiple switches.
pgs	brocade-vswitch	common-def:show/vnetwork	Returns information about discovered standard port-groups.
portledtest	brocade-diagnostics	diag	Runs various action modes on the port LEDs and validates the functionality.
portloopbacktest	brocade-diagnostics	diag	Sends frames between various ASICs on the switch and validates the ASIC functionality.
port-side-exhaust	brocade-chassis	fan/airflow-direction	Sets the airflow direction to exhaust-side intake.
port-side-intake	brocade-chassis	fan/airflow-direction	Sets the airflow direction to port-side intake.
post	brocade-diagnostics	diag	Run post verification test.
power	brocade-ras-ext	common-def:show/infra/environment	Shows power information.

TABLE 6 Actions (Continued)

Action name	Host module	Node	Purpose
power-off	brocade-linecard-management	linecardservice	Powers off a line card.
power-on	brocade-linecard-management	linecardservice	Powers on a line card.
prbstest	brocade-diagnostics	diag	Performs pseudo-random binary-sequence tests.
raslog	brocade-ras-ext	common-def:clear/logging	Clears the RASlog.
raslog	brocade-ras-ext	common-def:show/logging	Shows RASlog information.
recover	brocade-firmware	firmware	Aborts the firmware operation that is ready to be activated and then commits the firmware.
redundancy	brocade-ha	common-def:show/redundancy	Shows high availability redundancy state.
reload	brocade-ha	common-def:show/system/reload	Reloads the system.
remove	brocade-license	license	Removes the license keys.
remove	brocade-ras	system/usb	Deletes a file from a USB device.
restore	brocade-firmware	firmware/download	Restores the original firmware after evaluation.
results	brocade-diagnostics	common-def:show/diag/post	Displays the post verification test result.
sanity-check	brocade-firmware	firmware/download	Sanity check on the firmware download.
scp	brocade-firmware	firmware/download	Downloads firmware with SCP.
scp	brocade-firmware	firmware/download/default-config	Downloads firmware with SCP.
scp	brocade-firmware	firmware/download/logical-chassis	Downloads firmware with SCP for logical chassis.
scp	brocade-firmware	firmware/download/logical-chassis/default-config	Downloads firmware with SCP for logical chassis.
scp	brocade-ras	copy/support	Uploads support data to an SCP server.
security	brocade-threshold-monitor-ext	common-def:show/defaults	Displays default threshold and alert values for security
sensor	brocade-ras-ext	common-def:show/infra/environment	Returns sensor information.
sessions	brocade-aaa	common-def:clear/login	Unlocks a user account.
setcycle	brocade-diagnostics	diag	Configures all the parameters required for the system verification test.
setdbg	brocade-diagnostics	diag	Changes the debug level.
sfm	brocade-linecard-management	common-def:show/sfminfo	Displays switch fabric module information.
sfp	brocade-threshold-monitor-ext	common-def:show/defaults/threshold-monitor-extensions:threshold	Displays default threshold and alert values for SFP
sftp	brocade-firmware	firmware/download	Downloads firmware with SFTP.

B Actions

TABLE 6 Actions (Continued)

Action name	Host module	Node	Purpose
sftp	brocade-firmware	firmware/download/default-config	Downloads firmware with SFTP.
sftp	brocade-firmware	firmware/download/logical-chassis	Downloads firmware with SFTP for logical-chassis.
sftp	brocade-firmware	firmware/download/logical-chassis/default-config	Downloads firmware with SFTP for logical-chassis.
slots	brocade-linecard-management	common-def:show/slotsinfor	Displays information about all slots.
slotid	brocade-Enclosure-show	common-def:show/enclosure	Displays the present slot-id of switch.
sshkey	brocade-certutil	certutil/import	SSH public key import operation.
sshkey	brocade-certutil	common-def:no/cert-util	Displays user name length error message.
sshkey	brocade-certutil	common-def:show/certutil:cert-util	Displays user name length error message.
start	brocade-ha	ha/sync	Syncs up the system.
status	brocade-diagnostics	common-def:show	Displays currently running diagnostic tests.
status	brocade-ras-ext	common-def:show/copy-support	Shows copy support details.
status	brocade-sec-services	common-def:show/ssh/server	Displays the SSH server status.
status	brocade-sec-services	common-def:show/telnet/server	Displays the Telnet server status.
stop	brocade-ha	ha/sync	Syncs up the system.
support	brocade-ras-ext	common-def:clear/support	Clears support information.
support	brocade-ras-ext	common-def:show/support	Shows support information available for upload.
support-interactive	brocade-ras	copy	Enables interactive support data upload.
sync	brocade-firmware	firmware/download	Synchronizes the firmware with its peer.
syslogca	brocade-certutil	certutil/import	Imports the syslog server CA certificate.
syslogca	brocade-certutil	common-def:no/certutil	Deletes the syslog server CA certificate.
syslogcacert	brocade-certutil	common-def:show/cert-util	Displays the syslog server CA certificate.
systemverification	brocade-diagnostics	diag	Runs a combination of various hardware diagnostic tests.
temp	brocade-ras-ext	common-def:show/infra/environment	Shows temperature information.
timezone	brocade-clock	common-def:no/clock	Returns the timezone information.
topology	brocade-fabric-service	fabric/route	Topology is the layout pattern of interconnections of the various elements. This function provides fabric topology information as seen by a VCS fabric node, including the number of currently active paths to the destination, maximum number of hops to reach destination, cost of reaching destination, and so on.

TABLE 6 Actions (Continued)

Action name	Host module	Node	Purpose
trunk	brocade-fabric-service	common-def:show/fabric-service:fabric	Returns fabric ISL trunk information.
turboramtest	brocade-diagnostics	diag	Performs a turbo static RAM (SRAM) test of the ASIC chips.
type	brocade-ras-ext	rasman	Displays the details of the raslog messages based on the given raslog message type.
unlock	brocade-aaa	user	Unlocks a user account.
usb	brocade-firmware	firmware/download	Downloads firmware from a USB device.
usb	brocade-firmware	firmware/download/default-config	Downloads firmware from a USB device.
usb	brocade-firmware	firmware/download/logical-chassis	Downloads firmware from a USB device for logical chassis.
usb	brocade-ras	copy	Uploads support data to a USB device.
users	brocade-aaa-ext	common-def:show/aaa-users	Accesses the user information.
version	brocade-firmware-ext	common-def:show/firmware	Returns the firmware version string.
vms	brocade-vswitch	common-def:show/vnetwork	Returns information about discovered VMs.
vss	brocade-vswitch	common-def:show/vnetwork	Returns information about standard virtual switches.
zonemember	brocade-nameserver	common-def:show/:	Displays all nodes zoned with a device matching a specified WWN or PID.

B Actions