

# Brocade SLX-OS REST API Guide, 17s.1.00

Supporting the Brocade SLX 9140 and SLX 9240 Switches

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# Contents

---

<b>Preface</b> .....	<b>7</b>
Document conventions.....	7
Notes, cautions, and warnings.....	7
Text formatting conventions.....	7
Command syntax conventions.....	8
Brocade resources.....	8
Document feedback.....	8
Contacting Brocade Technical Support.....	9
Brocade customers.....	9
Brocade OEM customers.....	9
<b>About This Document</b> .....	<b>11</b>
Supported hardware and software.....	11
<b>Overview of the SLX-OS REST API</b> .....	<b>13</b>
REST API.....	13
Resources.....	13
Base resource.....	14
Protocol support.....	14
URIs.....	14
URI structure.....	15
<b>Using the Brocade SLX-OS REST API</b> .....	<b>17</b>
Before you begin .....	17
Logging in and out.....	17
Supported operations.....	17
GET.....	17
POST.....	18
PUT.....	19
PATCH.....	19
DELETE.....	20
HEAD.....	20
OPTIONS.....	21
Media types.....	21
XML resource representation.....	22
HTTP header.....	22
Request header.....	23
Response headers.....	23
HTTP status code and messages.....	24
<b>Configuration APIs</b> .....	<b>25</b>
aaa/accounting.....	25
aaa/authentication.....	27
acl-policy.....	30
alias-config.....	33
arp.....	35
banner.....	38
bridge-domain.....	40

cee-map.....	44
chassis.....	49
clock.....	52
cluster/{cluster-name},{cluster-id}.....	54
dot1x.....	61
filter-change-update-delay.....	64
hardware.....	67
interface/{interface-type}/{interface-name}/bfd.....	69
interface/{interface-type}/{interface-name}/channel-group.....	72
interface/{interface-type}/{interface-name}/delay-link-event.....	75
interface/{interface-type}/{interface-name}/dot1x.....	78
interface/{interface-type}/{interface-name}/ip.....	83
interface/{interface-type}/{interface-name}/ip/access-group.....	86
interface/{interface-type}/{interface-name}/ip/arp-aging-timeout.....	89
interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway.....	91
interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers.....	93
interface/{interface-type}/{interface-name}/ip/ospf/bfd.....	96
interface/{interface-type}/{interface-name}/ip/policy.....	99
interface/{interface-type}/{interface-name}/ip/proxy-arp.....	102
interface/{interface-type}/{interface-name}/ip/vrrp-extended.....	104
interface/{interface-type}/{interface-name}/ipv6/access-group.....	106
interface/{interface-type}/{interface-name}/ipv6/dhcp/relay.....	109
interface/{interface-type}/{interface-name}/ipv6/nd.....	112
interface/{interface-type}/{interface-name}/ipv6/ospf.....	120
interface/{interface-type}/{interface-name}/ipv6/ospf/bfd.....	125
interface/{interface-type}/{interface-name}/ipv6/policy.....	128
interface/{interface-type}/{interface-name}/ipv6/vrrp-extended.....	131
interface/{interface-type}/{interface-name}/link-error-disable.....	133
interface/{interface-type}/{interface-name}/link-fault-signaling.....	136
interface/{interface-type}/{interface-name}/lldp.....	139
interface/{interface-type}/{interface-name}/protocol/ptp.....	141
interface/{interface-type}/{interface-name}/qos.....	145
interface/{interface-type}/{interface-name}/rmon/collection.....	151
interface/{interface-type}/{interface-name}/sflow.....	154
interface/{interface-type}/{interface-name}/spanning-tree.....	157
interface/{interface-type}/{interface-name}/storm-control/ingress.....	162
interface/{interface-type}/{interface-name}/switchport.....	165
interface/{interface-type}/{interface-name}/switchport/port-security.....	170
interface/{interface-type}/{interface-name}/system.....	175
interface/{interface-type}/{interface-name}/vrrp-extended-group.....	178
interface/{interface-type}/{interface-name}/vrrp-group.....	182
interface/Port-channel.....	186
ip/access-list.....	189
ip/as-path.....	191
ip/community-list.....	194
ip/dhcp/relay.....	197
ip/extcommunity-list.....	200
ip/igmp.....	203
ip/prefix-list.....	206
ip/route.....	209

ip/route/static/bfd.....	212
ipv6/access-list.....	215
ipv6/nd.....	219
ipv6/prefix-list.....	222
ipv6/route/static/bfd.....	225
ipv6/router/ospf.....	229
ldap-server.....	246
ldap-server/host.....	248
ldap-server/maprole.....	251
link-fault-signaling.....	253
mac.....	256
mac-address-table.....	262
monitor/session.....	266
ntp.....	269
password-attributes.....	272
password-attributes/character-restriction.....	275
police-remark-profile.....	277
protocol/lldp.....	282
protocol/ptp.....	289
protocol/spanning-tree/mstp.....	292
protocol/spanning-tree/pvst.....	296
protocol/spanning-tree/rpvst.....	301
protocol/spanning-tree/rstp.....	306
protocol/spanning-tree/stp.....	310
protocol/vrrp.....	314
protocol/vrrp-extended.....	316
qos.....	318
radius-server.....	325
rmon.....	329
role.....	333
route-map.....	336
router/bgp.....	343
router/bgp/bfd.....	356
router/ospf.....	359
rule/{rule-name}/action.....	366
sflow.....	369
system-monitor.....	373
system-monitor-mail.....	378
system-monitor-mail/fru.....	380
system-monitor-mail/interface.....	382
system-monitor-mail/relay.....	385
system-monitor-mail/security.....	387
system-monitor-mail/sfp.....	390
tacacs-server.....	393
telemetry.....	396
username.....	401
vlan.....	403
vlan/dot1q.....	408
vlan/{vlan-name}/mac.....	410
vrf.....	413

<b>Operational-state APIs.....</b>	<b>417</b>
bridge-domain-mac-state.....	417
bridge-domain-state.....	418
bridge-domain-state/bridge-domain-list.....	420
mctd-client-state-state.....	422
mct-state.....	423
ptp-state/brief.....	425
ptp-state/clock.....	428
ptp-state/time-property.....	429
sfm-state.....	430
sub-interface-statistics-state/bridge-domain-statistics.....	434
sub-interface-statistics-state/bridge-domain-statistics/lif-statistics.....	436
<b>Operations API.....</b>	<b>439</b>
activate-status.....	439
dad-status.....	440
firmware-download.....	443
fwdl-status.....	445
get-arp.....	447
get-contained-in-ID.....	449
get-interface-detail.....	450
get-interface-switchport.....	454
get-ip-interface.....	456
get-last-config-update-time.....	458
get-last-config-update-time-for-xpaths.....	459
get-lldp-neighbor-detail.....	460
get-mac-acl-for-intf.....	462
get-mac-address-table.....	464
get-media-detail.....	466
get-netconf-client-capabilities.....	468
get-port-channel-detail.....	470
get-portchannel-info-by-intf.....	472
get-stp-brief-info.....	475
get-stp-mst-detail.....	478
get-system-uptime.....	483
get-vlan-brief.....	485
reload.....	487
set-http-application-url.....	488
show-clock.....	489
show-firmware-version.....	490
show-ntp.....	492
show-raslog.....	493
show-support-save-status.....	495
show-system-info.....	497
show-system-monitor.....	498

# Preface

---

- Document conventions..... 7
- Brocade resources..... 8
- Document feedback..... 8
- Contacting Brocade Technical Support..... 9

## Document conventions

The document conventions describe text formatting conventions, command syntax conventions, and important notice formats used in Brocade technical documentation.

## Notes, cautions, and warnings

Notes, cautions, and warning statements may be used in this document. They are listed in the 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 a stronger note, for example, to alert you when traffic might be interrupted or the device might reboot.



### 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.

## Text formatting conventions

Text formatting conventions such as boldface, italic, or Courier font may be used to highlight specific words or phrases.

Format	Description
<b>bold text</b>	Identifies command names. Identifies keywords and operands. Identifies the names of GUI elements.
<i>italic text</i>	Identifies text to enter in the GUI. Identifies emphasis. Identifies variables.
Courier font	Identifies document titles. Identifies CLI output.

Format	Description
	Identifies command syntax examples.

## Command syntax conventions

Bold and italic text identify command syntax components. Delimiters and operators define groupings of parameters and their logical relationships.

Convention	Description
<b>bold text</b>	Identifies command names, keywords, and command options.
<i>italic text</i>	Identifies a variable.
value	In Fibre Channel products, a fixed value provided as input to a command option is printed in plain text, for example, <code>--show WWN</code> .
[ ]	Syntax components displayed within square brackets are optional.  Default responses to system prompts are enclosed in square brackets.
{ x   y   z }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.  In Fibre Channel products, square brackets may be used instead for this purpose.
x   y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <code>member[member...]</code> .
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.

## Brocade resources

Visit the Brocade website to locate related documentation for your product and additional Brocade resources.

White papers, data sheets, and the most recent versions of Brocade software and hardware manuals are available at [www.brocade.com](http://www.brocade.com). Product documentation for all supported releases is available to registered users at [MyBrocade](http://MyBrocade).

Click the **Support** tab and select **Document Library** to access product documentation on [MyBrocade](http://MyBrocade) or [www.brocade.com](http://www.brocade.com). You can locate documentation by product or by operating system.

Release notes are bundled with software downloads on [MyBrocade](http://MyBrocade). Links to software downloads are available on the MyBrocade landing page and in the Document Library.

## 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. You can provide feedback in two ways:

- Through the online feedback form in the HTML documents posted on [www.brocade.com](http://www.brocade.com)
- By sending your feedback to [documentation@brocade.com](mailto:documentation@brocade.com)

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



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As a Brocade customer, you can contact Brocade Technical Support 24x7 online or by telephone. Brocade OEM customers should contact their OEM/solution provider.

## Brocade customers

For product support information and the latest information on contacting the Technical Assistance Center, go to [www.brocade.com](http://www.brocade.com) and select **Support**.

If you have purchased Brocade product support directly from Brocade, use one of the following methods to contact the Brocade Technical Assistance Center 24x7.

Online	Telephone
<p>Preferred method of contact for non-urgent issues:</p> <ul style="list-style-type: none"> <li>• Case management through the <a href="#">MyBrocade</a> portal.</li> <li>• Quick Access links to Knowledge Base, Community, Document Library, Software Downloads and Licensing tools</li> </ul>	<p>Required for Sev 1-Critical and Sev 2-High issues:</p> <ul style="list-style-type: none"> <li>• Continental US: 1-800-752-8061</li> <li>• Europe, Middle East, Africa, and Asia Pacific: +800-AT FIBREE (+800 28 34 27 33)</li> <li>• <a href="#">Toll-free numbers</a> are available in many countries.</li> <li>• For areas unable to access a toll-free number: +1-408-333-6061</li> </ul>

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- Brocade Supplemental Support augments your existing OEM support contract, providing direct access to Brocade expertise. For more information, contact Brocade or your OEM.
- For questions regarding service levels and response times, contact your OEM/solution provider.



# About This Document

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- [Supported hardware and software](#).....11

## Supported hardware and software

In those instances in which procedures or parts of procedures documented here apply to some devices but not to others, this guide identifies exactly which devices are supported and which are not.

Although many different software and hardware configurations are tested and supported by Brocade Communications Systems, Inc. for SLX-OS Release 17s.1.00, documenting all possible configurations and scenarios is beyond the scope of this document.

The following hardware platforms are supported by this release:

- Brocade SLX 9140 switch
- Brocade SLX 9240 switch

### NOTE

Some of the commands in this document use a slot/port designation. Because the Brocade SLX 9140 switch and the Brocade SLX 9240 switch do not contain line cards, the slot designation must always be "0" (for example, 0/1 for port 1).

To obtain information about other Brocade OS versions, refer to the documentation specific to that version.



# Overview of the SLX-OS REST API

- REST API..... 13
- Resources..... 13

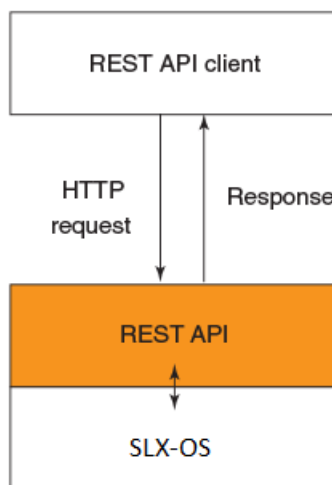
## REST API

REST web service is the northbound interface to the SLX-OS platform, used to manage the nodes across the cluster.

REST web service supports all Create, Read, Update, and Delete (CRUD) operations on the configuration data and supports the YANG-RPC commands.

REST web service leverages HTTP, and uses its standard methods to perform the operations on the resources. Apache web server embedded in the VDX switches is used to serve the REST API to the clients.

FIGURE 1 SLX-OS REST API architecture



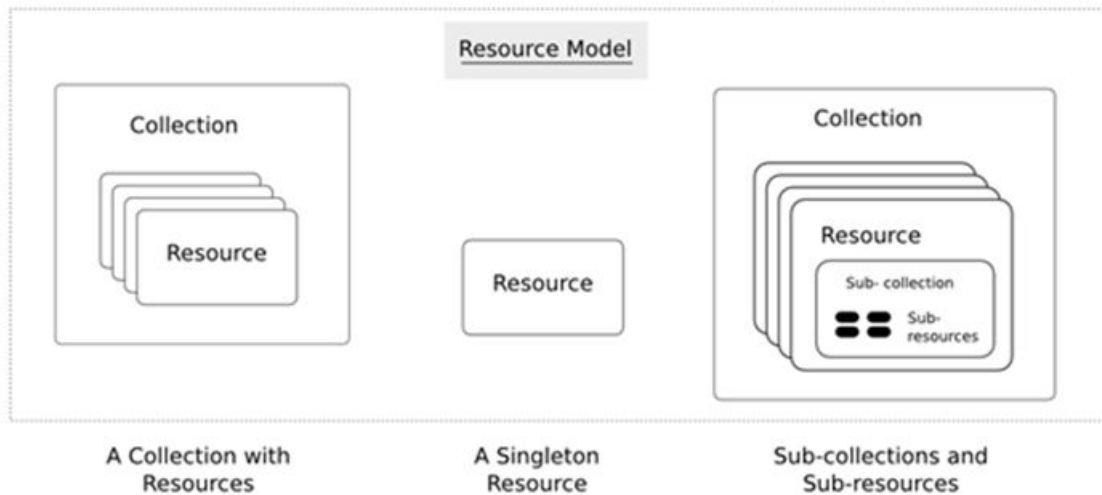
## Resources

A resource is an object with a type, associated data, relationships to other resources, and a set of methods that operate on it.

Only a few standard methods are defined for the resource corresponding to the standard HTTP, such as GET, HEAD, OPTIONS, POST, PUT, PATCH, and DELETE. Resources can be grouped into collections (in the YANG model, it is represented as a "List" statement). Each collection is homogeneous (it contains only one type of resource) and unordered.

Resources can also exist outside any collection. These resources are known as singleton resources (in the YANG model, it is represented as a "Container" statement). Collections are resources themselves. For example, resources defined in the YANG model are physical interface, port-channel, VLAN, switchport, access-list, and so on. The following figure describes the resource model.

FIGURE 2 Resource Model



Base resource, Configuration resource, YANG-RPC Operations resource, and Operational-state are the types of resources that are supported to represent the configuration data and YANG-RPC operations.

## Base resource

The base resource represents the high-level resources in the system, and is categorized under the media type "application/vnd.base.resource+xml".

The entry point container in the resource model is "/rest"; all fields, and sub-resources with the same resource type are defined in the namespace "http://brocade.com/ns/rest".

The base resource consists of Configuration resource (/config), YANG-RPC Operations resource (/operations), and operational-state (/operational-state) resources as first-level child resources.

## Protocol support

The SLX-OS REST API supports HTTP.

By default, the HTTP port number is 80.

## URIs

A Uniform Resource Identifier (URI) is a link to the resource.

The URI is used to identify the resource. It is the only means for clients and servers to exchange the representations.

URIs consists of two parts:

- Base URI: The base URI is specific to the SLX-OS server. All URIs accessing the same server use the same base URI.
- Request URI: The request URI is the URI used to perform a GET, POST, PUT, PATCH, DELETE, HEAD, and OPTIONS request.

In the following examples of SLX-OS API URIs, the text in bold is the base URI and the remaining portion is the request URI:

<http://10.20.234.122:80/rest/config/running/fabric>

#### NOTE

URIs are case-sensitive.

## URI structure

The hierarchical structure of the URI is to support the containment based on the resources defined in the YANG model using the statement "List" and "Container"

The URI path conveys a resource model that is similar to the YANG model, with each forward slash-separated path segment corresponding to a unique resource within the model's hierarchy (using the following syntax: <base\_URI>/path1/path2/{key1},{key2}/path3/...).

For example, the URI "/rest/config/running/interface/ethernet" identifies the collection of Ethernet interfaces as target resources. In this example, from the path element.../interface onwards it represents the YANG model.

- rest - The entry point
- config - Represents the configuration datastore resource
- running - Represents the running configuration datastore
- interface - Represents all interfaces present in the running configuration
- ethernet - Represents all the Ethernet interfaces present in the running configuration

Similarly, the URI "/rest/config/running/interface/Port-channel/101" identifies the interface resource containing the Port-channel name101.

## URI encoding

- A key that contains a forward slash (/) must be contained within a pair of double quotes(""). The double quotes character is encoded as %22. For example, a value of 1/1 for {interface-name} is represented in a URI as "1/1", which is encoded as %221/1%22.
- The delimiter between adjacent keywords in URIs is a Comma (.). This is encoded as %2C.

## Base URI

The base URI (<http://host:port/rest/>) is the entry point to access and manage all the resources defined in the system. The port is the default HTTP port (80). It is used to identify the base resource, and retrieves its first-level child resources of the base resource.

#### NOTE

A leaf attribute can also be present in the URI to identify the exact resource. For example, the URI <http://host:port/rest/config/running/interface/port-channel/<po-id>/switch-port> is used to identify the switch-port resource of the port-channel.

## Top-level URIs

The URI identifies its first-level resource in its hierarchy with the given media type in its request; as shown in the following examples:

- <http://<Base URI>/config/running> - To access the running configuration resources.
- <http://<Base URI>/operations> - To access the YANG-RPC operation resources.
- <http://<Base URI>/operational-state> - To access the operational-state of the resources





# Using the Brocade SLX-OS REST API

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- Before you begin ..... 17
- Logging in and out..... 17
- Supported operations..... 17
- Media types..... 21
- XML resource representation..... 22
- HTTP header..... 22
- HTTP status code and messages..... 24

## Before you begin

Before you can use the Brocade SLX-OS REST API, obtain a username and password for accessing SLX-OS through the REST API.

## Logging in and out

You can log in to the device by entering the username and password or the session ID provided by the switch after authenticating the initial request from the client.

If the authentication is successful, the response header "Authentication-Token" is sent to the client. From then, client applications can use this token and send it to the server for the authentication for further access to the server by using the same persistent connection. The client applications use this token to obtain further access to the server using the persistent connection.

To log out from the device, you must delete the session created using the DELETE operation. The URI is `http://host:port/rest/session/<session-id>`.

## Supported operations

All Create, Read, Update, and Delete (CRUD) operations are supported and performed by using the standard HTTP methods: GET, POST, PUT, PATCH, DELETE, HEAD, and OPTIONS.

### GET

The GET method is used to retrieve the representation of the resource (for example, operational-state) including the metadata information.

For example, the following GET method with the Resource-Depth header and its value of 6 requests the client to retrieve the operational state of CFM connectivity.

```
GET /rest/operational-state/cfm-state/cfm-connectivity/domain/test/ma/name//ma-type HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.18 Basic ECC zlib/1.2.3 libidn/1.18
libssh2/1.4.2
Host: 10.1.1.1
Accept: application/vnd.operational-state.resource+xml
Resource-Depth: 6
```

The following response contains XML representation of the target resource.

```
<ma xmlns="urn:brocade.com:mgmt:brocade-dotlag-operational" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state/cfm-state/cfm-connectivity/domain/test/ma/name">
  <ma-name>name</ma-name>
  <ma-idx>1</ma-idx>
  <ma-type>0</ma-type>
  <ccm-interval>1000</ccm-interval>
  <vlan-id>120</vlan-id>
  <priority>1</priority>
  <mep y:self="/rest/operational-state/cfm-state/cfm-connectivity/domain/test/ma/name/mep/1">
    <mep-id>1</mep-id>
    <mep-direction>mep-status-up</mep-direction>
    <mep-mac>768e.f809.e813</mep-mac>
    <mep-port>&quot;Eth 1/15&quot;</mep-port>
    <port-state>0</port-state>
    <rmep y:self="/rest/operational-state/cfm-state/cfm-connectivity/domain/test/ma/name/mep/1/rmep/2">
      <rmep-id>2</rmep-id>
      <rmep-mac>0000.0000.0000</rmep-mac>
      <vlan-id>0</vlan-id>
      <rmep-port>&quot;&quot;</rmep-port>
      <rmep-state>0</rmep-state>
    </rmep>
  </mep>
</ma>
```

#### NOTE

A request payload is not required for a GET operation.

## POST

The POST method is used to create a new resource in the specific resource location identified by the URI specified in the given request, and is used to identify YANG-RPC operation resources. The URI of the newly created resource is mentioned in the "Location" header of the response.

The following example shows the POST request to add a new LDAP server.

#### Request header

```
POST /rest/config/running/ldap-server HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.12.9.0
zlib/1.2.3 libidn/1.18 libssh2/1.2.2
Host: 192.168.10.2
Accept: application/vnd.configuration.resource+xml
Content-Length: 51
```

#### Request message body

```
<host>
  <hostname>LDAP_TEST_HOST</hostname>
</host>
```

On successful creation, the response contains an empty message body and the following headers with status.

#### Response

```
HTTP/1.1 100 Continue
HTTP/1.1 201 Created
Date: Tue, 24 Jun 2016 10:38:15 GMT
Server: SLX-OS Wave WWW
Location: http://192.168.10.2/rest/config/running/ldap-server/host/test_API
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

**NOTE**

A request payload is required for a POST operation.

## PUT

The PUT method is used to update or replace an existing "Container" resource completely. If the URI does not identify the resource to be replaced, then the resource in the request URI is newly created, and the URI of the newly created resource is mentioned in the "Location" header of the response

This method creates the new resource, instead of replacing it, if the targeted resource is defined as a "List" statement in the YANG model.

The following example shows the PUT request to set the Active Directory parameters.

**Request header**

```
PUT /rest/config/running/ldap-server/host HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.12.9.0
zlib/1.2.3 libidn/1.18 libssh2/1.2.2
Host: 10.20.234.122
Accept: application/vnd.configuration.resource+xml
Content-Length: 165
```

**Request message body**

```
<host>
  <port>500</port>
  <retries>50</retries>
  <timeout>60</timeout>
  <basedn>sample</basedn>
</host>
```

On successful replace, the response contains an empty message body and the following headers with status.

**Response**

```
HTTP/1.1 204 No Content
Date: Tue, 24 Jun 2016 11:03:55 GMT
Server: SLX-OS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

**NOTE**

A request payload is required for a PUT operation.

## PATCH

The PATCH method is used to edit or update the leaf attributes of the resource (List or Container), if the system supports the modification. For example, modifying the leaf or list child resource of the ACL sequence command is not possible, as it is not allowed in the system.

The following example shows the PATCH request to update the Active Directory parameter values.

**Request header**

```
PATCH /rest/config/running/ldap-server/host/test_API HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.12.9.0
zlib/1.2.3 libidn/1.18
libssh2/1.2.2
Host: 192.168.10.2
```

```
Accept: application/vnd.configuration.resource+xml
Content-Length: 55
```

### Request message body

```
<host>
  <basedn>sample_test</basedn>
</host>
```

On successful update of an attribute, the response contains an empty message body and the following headers with status.

### Response

```
HTTP/1.1 204 No Content
Date: Tue, 24 Jun 2016 11:15:48 GMT
Server: SLX-OS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

#### NOTE

A request payload is required for a PATCH operation.

## DELETE

The DELETE method is used to delete the known resource.

The following example shows the DELETE request to delete an existing LDAP server.

### Request header

```
DELETE /rest/config/running/ldap-server/host/test_API HTTP/1.1
User-Agent: curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.12.9.0 zlib/1.2.3 libidn/1.18
libssh2/1.2.2
Host: 192.168.10.2
Accept: */*
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
```

On successful deletion of the resource, the response contains an empty message body and the following headers with status.

### Response

```
HTTP/1.1 204 No Content
Date: Tue, 24 Jun 2016 10:50:33 GMT
Server: SLX-OS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

#### NOTE

An authorization header is required to perform a DELETE operation.

#### NOTE

A request payload is not required for a DELETE operation.

## HEAD

The HEAD method is used to retrieve the metadata information of the resource, identified by the given request. The response to this operation contains only the headers and an empty response body.

## Request header

```
HEAD /rest/config/running/mac/access-list/standard/testacl1 HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent: <REST client>
Host: 192.168.10.2:80
Accept: application/vnd.configuration.resource+xml
```

On successful retrieval of the resource, the response contains an empty message body and the following headers with status.

## Response

```
HTTP/1.1 200 OK
Server: Wave World Wide Web Server (W4S) v0.0.1
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Date: Tue, 03 Dec 2013 07:40:43 GMT
Content-Type: application/vnd.configuration.resource+xml
```

### NOTE

A request payload is not required for a HEAD operation.

## OPTIONS

The OPTIONS method is used to retrieve the allowed methods on the resource identified by the given request. The response to this operation contains the headers and an empty response body. The "Allow" header contains the allowed operations on the resource.

## Request header

```
OPTIONS /rest/config/running/mac/access-list/standard/testacl1 HTTP/1.1
Authorization: Basic YWRtaW46cGFzc3dvcmQ=
User-Agent:<REST client>
Host: 192.168.10.2:80
Accept: application/vnd.configuration.resource+xml
```

## Response

```
HTTP/1.1 200 OK
Server: Wave World Wide Web Server (W4S) v0.0.1
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Date: Tue, 03 Dec 2013 07:40:55 GMT
Content-Length: 0
Content-Type: text/html
Allow: DELETE, GET, HEAD, PATCH, POST, PUT
```

### NOTE

A request payload is not required for an OPTIONS operation.

## Media types

Media types identify the form of the data contained within a resource representation.

Media type is an application-specific format with a well-defined name represented in the form of an identifier. Media types are specified in the Accept and Content-Type header's value for the request and the response respectively.

Media types are specific to resources, allowing them to change independently and support formats that other resources do not.

**TABLE 1** Media types

Media type	Resources
application/vnd.base.resource+xml	Represents the high-level base resources such as configuration datastore and operational state resource.

**TABLE 1** Media types (continued)

Media type	Resources
application/vnd.configuration.resource+xml	Represents resources defined for the configuration command derived from a YANG module.
application/vnd.operational-state.resource+xml	Represents the operational-state resources defined in the YANG model
application/vnd.operations.resource+xml	Represents the defined YANG-RPC operations.

## XML resource representation

A resource is represented in XML as an XML element, with an XML attribute "y:self" that contains the URI for the resource. Sub-resources are encoded as sub-elements to the resource element.

Single-valued resource properties are encoded as sub-elements to the resource element, with the value encoded as character data in the sub-element.

In the XML representation, every resource has an XML attribute: y:self="...". In the representation of a list resource, the keys are always present and encoded first. Leafs are properties of the resource.

The following example shows the XML representation of the "access-list" resource."

```
<mac xmlns="urn:brocade.com:mgmt:brocade-mac-access-list" xmlns:y="urn:brocade.com:mgmt:brocade-mac-access-list" y:self="/rest/config/mac">
  <access-list y:self="/rest/config/running/mac/access-list">
    <standard y:self="/rest/config/running/mac/access-list/standard/stdmac">
      <name>stdmac</name>
    </standard>
  </access-list>
</mac>
```

## HTTP header

HTTP header fields are components of the message header of a request and response in HTTP.

They define the operating parameters and are name/value pairs that appear in both request and response messages. The name of the header is separated from the value by a single colon.

The following table contains the supported HTTP methods for the media types.

**TABLE 2** Methods and supported media types

Method	Media types
HEAD	Supports all media types for this method
OPTIONS	Supports all media types for this method
GET	Supports all media types for this method
POST	application/vnd.configuration.resource+xml application/vnd.operations.resource+xml
PUT	application/vnd.configuration.resource+xml
PATCH	application/vnd.configuration.resource+xml
DELETE	application/vnd.configuration.resource+xml

For more information about the media types, refer to the [Media types](#) on page 21 section.

## Request header

Standard request header: The supported standard request headers are:

- Cache-Control
- Date
- Authorization
- Accept-Charset
- Accept-Encoding
- Accept-Language
- Connection
- Host
- Accept
- User-Agent
- Content-Length

### NOTE

All Brocade REST API requests that return data support only the XML format.

Custom request header: The following headers are supported to facilitate the retrieval, datastore information, and API versioning.

Header name	Description	Header value; Methods; Media types
Resource-Depth	Used in the client request to inform the server to retrieve the nested child resources in the same response as inline.	Header value: <1..max> Methods: GET Media types: All

## Response headers

Standard response header: The following are the supported standard response headers:

- Allow
- Cache-Control
- Connection
- Content-Encoding
- Content-Language
- Content-Length
- Content-Location
- Content-Type
- Date
- Location
- Server
- Status
- WWW-Authenticate
- Transfer-Encoding

**NOTE**

All Brocade REST API requests that return data support only the XML format.

## HTTP status code and messages

Both success and error status are reported to the client by way of the HTTP Status-Line, which contains the HTTP status code. The application-specific error messages are similar to the CLI error messages.

**TABLE 3** HTTP status code

Status-Line	Description
100 Continue	POST is accepted, 201 should follow
200 OK	Success with response body
201 Created	POST to create a resource success
202 Accepted	POST to create a resource accepted
204 No Content	Success without response body
400 Bad Request	Invalid request message
403 Forbidden	Access to resource denied
404 Not Found	Resource target or resource node not found
405 Method Not Allowed	Method not allowed for target resource
413 Request Entity Too Large	Too-big error
414 Request-URI Too Large	Too-big error
415 Unsupported Media	Not supported media type
500 Internal Server Error	Operation failed. Note: In this case, the response body will contain the application's specific error message.
501 Not Implemented	Unknown operation
503 Service Unavailable	Recoverable server error



# Configuration APIs

---

## aaa/accounting

Configures, modifies, or retrieves login or command accounting configuration.

### Resource URIs

URI	Description
<base_URI>/config/running/aaa/accounting	Login or command accounting
<base_URI>/config/running/aaa/accounting/commands	Enables or disables command accounting
<base_URI>/config/running/aaa/accounting/exec	Enables or disables login accounting

### Parameters

*server-type*

Enables or disables login accounting. Possible values are:

**None**

Disables login accounting.

**tacacs+**

Configures to use TACACS+ servers.

### Usage Guidelines

GET, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the default configuration details.

### URI

http://host:80/rest/config/running/aaa/accounting/exec/default

### Request Body

None

### Response Body

```
<default xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/aaa/accounting/exec/default">
  <start-stop y:self="/rest/config/running/aaa/accounting/exec/default/start-stop">
    <server-type>none</server-type>
  </start-stop>
</default>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# aaa/authentication

Configures, retrieves, and modifies authentication, authorization, and accounting (AAA) login sequence.

## Resource URIs

URI	Description
<base_URI>/config/running/aaa/authentication	Configures AAA login sequence.

GET URIs	Description
<base_URI>/config/running/aaa/authentication	Configures AAA login sequence.
<base_URI>/config/running/aaa/authentication/login	Specifies the type of server that will be used for authentication, authorization, and accounting (AAA) on the device. The local server is the default.
<base_URI>/config/running/aaa/authentication/login/first	Configures the primary source of authentication.
<base_URI>/config/running/aaa/authentication/login/second	Configures the secondary source of authentication.

PATCH URIs	Payload	Description
<base_URI>/config/running/aaa/authentication/login	<login><first>{enumeration}</first></login>	Configures the order of sources for login and sets the primary source of authentication.

PUT URIs	Payload	Description
<base_URI>/config/running/aaa/authentication/login/first	<first>{enumeration}</first>	Configures the order of sources for login and sets the primary source of authentication.
<base_URI>/config/running/aaa/authentication/login/second	<second>{enumeration}</second>	Configures the order of sources for login and sets the secondary source of authentication.

DELETE URIs
<base_URI>/config/running/aaa/authentication/login/first
<base_URI>/config/running/aaa/authentication/login/second

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/aaa/authentication

### Request Body

None

### Response Body

```
<authentication xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/aaa/authentication">
  <login y:self="/rest/config/running/aaa/authentication/login">
    <first>radius</first>
    <second>local-auth-fallback</second>
  </login>
</authentication>
```

The following example uses the PUT option to configure AAA login sequence.

### URI

http://host:80/rest/config/running/aaa/authentication/login/first

### Request Body

```
<first>radius</first>
```

### Response Body

None

The following example uses the DELETE option to remove AAA login sequence.

### URI

http://host:80/rest/config/running/aaa/authentication/login/first

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# acl-policy

Configures, modifies, or retrieves access control list (ACL) configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/acl-policy	Configures ACL policy.

GET URIs	Description
<base_URI>/config/running/acl-policy	Retrieves ACL policy.
<base_URI>/config/running/acl-policy/allow-conflicting-rules	Allows conflicting rules in an ACL table.
<base_URI>/config/running/acl-policy/allow-duplicate-rules	Allows duplicate rules in an ACL table.

POST URIs	Payload	Description
<base_URI>/config/running/acl-policy	<acl-policy>{}</acl-policy>	Configures ACL policy.
<base_URI>/config/running/acl-policy/allow-conflicting-rules	<allow-conflicting-rules>true</allow-conflicting-rules>	Allows conflicting rules in an ACL table.
<base_URI>/config/running/acl-policy/allow-duplicate-rules	<allow-duplicate-rules>true</allow-duplicate-rules>	Allows duplicate rules in an ACL table.

PATCH URIs	Payload	Description
<base_URI>/config/running/acl-policy/allow-conflicting-rules	<allow-conflicting-rules />	Allows conflicting rules in an ACL table.
<base_URI>/config/running/acl-policy/allow-duplicate-rules	<allow-duplicate-rules />	Allows duplicate rules in an ACL table.

PUT URIs	Payload	Description
<base_URI>/config/running/acl-policy/allow-conflicting-rules	<allow-conflicting-rules>true</allow-conflicting-rules>	Allows conflicting rules in an ACL table.
<base_URI>/config/running/acl-policy/allow-duplicate-rules	<allow-duplicate-rules>true</allow-duplicate-rules>	Allows duplicate rules in an ACL table.

DELETE URIs
<base_URI>/config/running/acl-policy
<base_URI>/config/running/acl-policy/allow-conflicting-rules
<base_URI>/config/running/acl-policy/allow-duplicate-rules

## Parameters

### *allow-conflicting-rules*

Allows conflicting rules in a ACL table.

### *allow-duplicate-rules*

Allows duplicate rules in a ACL table.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/acl-policy

### *Request Body*

None

### *Response Body*

```
<acl-policy xmlns="urn:brocade.com:mgmt:brocade-acl-policy" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/acl-policy">
  <allow-conflicting-rules>true</allow-conflicting-rules>
  <allow-duplicate-rules>true</allow-duplicate-rules>
</acl-policy>
```

The following is an example PATCH operation to allow duplicate rules in a ACL table.

### *URI*

http://host:80/rest/config/running/acl-policy/allow-conflicting-rules

### *Request Body*

```
<allow-conflicting-rules />
```

### *Response Body*

None

The following is an example of the DELETE operation to remove the ACL policy.

### *URI*

http://host:80/rest/config/running/acl-policy

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.



# alias-config

Configures, modifies, or retrieves alias configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/alias-config	User and global alias
<base_URI>/config/running/alias-config/alias	Global alias.
<base_URI>/config/running/alias-config/user	User alias.

## Parameters

*alias*

Configures global alias.

*user*

Configures user alias mode.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

### NOTE

The DELETE operation is supported only on alias and user URIs.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/alias-config

### Request Body

None

### Response Body

```
<alias-config xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/alias-config">
  <user y:self="/rest/config/running/alias-config/user/30">
    <name>30</name>
  </user>
</alias-config>
```

The following example uses the PATCH option to configure the user name .

### *URI*

http://host:80/rest/config/running/alias-config

### *Request Body*

```
<alias-config><user><name>30</name></user></alias-config>
```

### *Response Body*

None

The following example uses the DELETE option to remove the user name configuration.

### *URI*

http://host:80/rest/config/running/alias-config

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# arp

Configures, modifies, or retrieves Address Resolution Protocol (ARP) Configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/arp	Configures Address Resolution Protocol (ARP).

GET URIs	Description
<base_URI>/config/running/arp/{arp-ip-address}	Retrieves Address Resolution Protocol (ARP) configuration information.

PATCH URIs	Payload	Description
<base_URI>/config/running/arp	<arp><arp-ip-address>{inet:ipv4-address}</arp-ip-address><mac-address-value>{mac-access-list:mac-address-type}</mac-address-value><interfacename>{interface-name}</interfacename><Ethernet>{interface:interface-type}</Ethernet></arp>	Configures ARP IP address and MAC address for Ethernet interface.
<base_URI>/config/running/arp	<arp><arp-ip-address>{inet:ipv4-address}</arp-ip-address><mac-address-value>{mac-access-list:mac-address-type}</mac-address-value><interfacename>{interface-name}</interfacename><Ve>{interface:vlan-type}</Ve></arp>	Configures ARP IP address and MAC address for Ve interface.

DELETE URIs
<base_URI>/config/running/arp/{arp-ip-address}

## Parameters

*arp-ip-address*

Specifies the IP address of the ARP entry.

*mac-address-value*

Specifies the MAC address in HHHH.HHHH.HHHH format.

*interfacename*

Specifies the interface to use.

## Usage Guidelines

GET, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/arp

### Request Body

None

### Response Body

```
<arp xmlns="urn:brocade.com:mgmt:brocade-arp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/arp/10.24.25.26">
  <arp-ip-address>10.24.25.26</arp-ip-address>
  <mac-address-value>0000.2222.2233</mac-address-value>
  <interfacename>interface</interfacename>
  <Ethernet>1/1</Ethernet>
</arp>
```

The following is an example of the PATCH operation to modify ARP configuration.

### URI

http://host:80/rest/config/running/arp

### Request Body

```
<arp>
  <arp-ip-address>10.34.23.56</arp-ip-address>
  <mac-address-value>0001.0002.0003</mac-address-value>
  <interfacename>interface</interfacename>
  <Ve>233</Ve>
</arp>
```

### Response Body

None

The following is an example of the DELETE operation to remove the ARP configuration.

### URI

http://host:80/rest/config/running/arp/10.34.23.56

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# banner

Configures, modifies, or retrieves banner messages.

## Resource URIs

URI	Description
<base_URI>/config/running/banner	Retrieves banner messages.

## Parameters

*login*

Specifies the message string to be displayed on the switch console.

*motd*

Specifies the message string to be displayed on the switch console. The number of lines can be from 1 through 2048. Enter Message of the Day banner text in single line mode or press Esc+M to enter multiline mode.

*incoming*

Specifies the message string to be displayed on the switch console. The number of lines can be from 1 through 2048. Enter incoming banner text in single line mode or press Esc+M to enter multiline mode.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/banner

### Request Body

None

### Response Body

```
<banner xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/banner">
  <incoming>2000</incoming>
</banner>
```

The following example uses the PATCH option to configure the incoming settings.

**URI**

http://host:80/rest/config/running/banner

**Request Body**

<banner><incoming>2000</incoming></banner>

**Response Body**

None

The following is an example of the DELETE operation to remove a message of the day banner message.

**URI**

http://host:80/rest/config/running/banner

**Request Body**

None

**Response Body**

None

## History

Release version	History
17s.1.00	This API call was introduced.

# bridge-domain

Configures a bridge domain.

## Resource URIs

URI	Description
<base_URI>/config/running/bridge-domain	Configures a bridge domain.

GET URIs	Description
<base_URI>/config/running/bridge-domain	Retrieves bridge domain configuration information.
<base_URI>/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/statistics	Configures statistics.
<base_URI>/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/bpdu-drop-enable	Enables BPDU drop functionality.

POST URIs	Payload	Description
<base_URI>/config/running	<bridge-domain><bridge-domain-id>{req_val}</bridge-domain-id><bridge-domain-type>{req_val}</bridge-domain-type></bridge-domain>	Configures a bridge domain.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}	<peer><peer-ip>{req_val}</peer-ip></peer>	Configures bridge domain peer.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/logical-interface	<ethernet><lif-bind-id>{req_val}</lif-bind-id></ethernet>	Configures logical interface.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/logical-interface	<port-channel><pc-lif-bind-id>{req_val}</pc-lif-bind-id></port-channel>	Configures logical interface as port-channel.

PUT URIs	Payload	Description
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}/load-balance	<load-balance />	Configures load-balancing.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/statistics	<statistics />	Configures statistics.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/pw-profile	<pw-profile>{common-def.name-string64}</pw-profile>	Sets the Pw-profile name. The maximum size is 64.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/bpdu-drop-enable	<bpdu-drop-enable />	Enables BPDU drop functionality.

PATCH URIs	Payload	Description
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}	<bridge-domain><vc-id>{uint32}</vc-id></bridge-domain>	Configures bridge domain.



PATCH URIs	Payload	Description
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}	<bridge-domain><statistics /></bridge-domain>	Configures statistics.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}	<bridge-domain><bpdudrop-enable /></bridge-domain>	Enables BPDU drop functionality.

DELETE URIs
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/statistics
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/logical-interface/ethernet/{lif-bind-id}
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/logical-interface/port-channel/{pc-lif-bind-id}
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/bpdudrop-enable

## Parameters

*bridge-domain-id*

The bridge domain ID.

*bridge-domain-type*

The bridge domain type.

*logical-interface*

Specifies the logical interface.

*bpdudrop-enable*

Specifies the BPDU drop enable feature.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details for two instances of bridge-domain-id.

### URI

http://host:80/rest/config/running/bridge-domain

### Request Body

None

### Response Body

```
<bridge-domain xmlns="urn:brocade.com:mgmt:brocade-bridge-domain" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/bridge-domain/1%2Cp2mp">
  <bridge-domain-id>1</bridge-domain-id>
  <bridge-domain-type>p2mp</bridge-domain-type>
</bridge-domain>
<bridge-domain xmlns="urn:brocade.com:mgmt:brocade-bridge-domain" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/bridge-domain/2%2Cp2mp">
  <bridge-domain-id>2</bridge-domain-id>
  <bridge-domain-type>p2mp</bridge-domain-type>
</bridge-domain>
```

The following example uses the POST option to configure a bridge domain.

### URI

http://host:80/rest/config/running/bridge-domain

### Request Body

```
<bridge-domain>
  <bridge-domain-id>1</bridge-domain-id>
  <bridge-domain-type>p2mp</bridge-domain-type>
</bridge-domain>
```

### Response Body

None

The following example uses the DELETE option to remove a bridge domain.

### *URI*

http://host:80/rest/config/running/bridge-domain

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

## cee-map

Configures, modifies, or retrieves Converged Enhanced Ethernet (CEE) provisioning map details.

### Resource URIs

URI	Description
<base_URI>/config/running/cee-map/{name}	Configures Converged Enhanced Ethernet (CEE) provisioning map details.

GET URIs	Description
<base_URI>/config/running/cee-map/{name}	Displays CEE map.
<base_URI>/config/running/cee-map/{name}/precedence	Displays precedence value.
<base_URI>/config/running/cee-map/{name}/priority-group-table/{PGID}	Retrieves priority group table.
<base_URI>/config/running/cee-map/{name}/priority-table	Retrieves priority table.
<base_URI>/config/running/cee-map/{name}/priority-table/map-cos7-pgid	Retrieves cos7 mapping.
<base_URI>/config/running/cee-map/{name}/remap	Display Class of Service (CoS) status.
<base_URI>/config/running/cee-map/{name}/remap/lossless-priority	Displays CoS for lossless priority.
<base_URI>/config/running/cee-map/{name}/remap/lossless-priority/priority	Displays lossless-priority remapped CoS value.

POST URIs	Payload	Description
<base_URI>/config/running	<cee-map><name>{cee-map-name-type}</name></cee-map>	Configures CEE map.
<base_URI>/config/running/cee-map/{name}	<priority-group-table><PGID>{qos-type-PGID}</PGID><weight>{int32}</weight><pfcc>{enumeration}</pfcc></priority-group-table>	Configures a Priority Group Table.

PUT URIs	Payload	Description
<base_URI>/config/running/cee-map/{name}/precedence	<precedence>{int32}</precedence>	Sets precedence value.
<base_URI>/config/running/cee-map/{name}/priority-table	<priority-table><map-cos0-pgid>{string}</map-cos0-pgid><map-cos1-pgid>{string}</map-cos1-pgid><map-cos2-pgid>{string}</map-cos2-pgid><map-cos3-pgid>{string}</map-cos3-pgid><map-cos4-pgid>{string}</map-cos4-pgid><map-cos5-pgid>{string}</map-cos5-pgid><map-cos6-pgid>{string}</map-cos6-pgid><map-cos7-pgid>{string}</map-cos7-pgid></priority-table>	the CEE priority group table mapping for the Priority Group ID (PGID).
<base_URI>/config/running/cee-map/{name}/remap/lossless-priority/priority	<priority>{int32}</priority>	Sets lossless-priority remapped CoS value.

PATCH URIs	Payload	Description
<base_URI>/config/running/cee-map/{name}	<cee-map><precedence>{int32}</precedence></cee-map>	Sets precedence value.
<base_URI>/config/running/cee-map/{name}/priority-group-table/{PGID}	<priority-group-table><weight>{int32}</weight><pfrc>{enumeration}</pfrc></priority-group-table>	Configures priority group.
<base_URI>/config/running/cee-map/{name}/priority-table	<priority-table><map-cos0-pgid>{string}</map-cos0-pgid><map-cos1-pgid>{string}</map-cos1-pgid><map-cos2-pgid>{string}</map-cos2-pgid><map-cos3-pgid>{string}</map-cos3-pgid><map-cos4-pgid>{string}</map-cos4-pgid><map-cos5-pgid>{string}</map-cos5-pgid><map-cos6-pgid>{string}</map-cos6-pgid><map-cos7-pgid>{string}</map-cos7-pgid></priority-table>	the CEE priority group table mapping for the Priority Group ID (PGID).
<base_URI>/config/running/cee-map/{name}/remap/lossless-priority	<lossless-priority><priority>{int32}</priority></lossless-priority>	Sets lossless-priority remapped CoS value.

DELETE URIs
<base_URI>/config/running/cee-map/{name}
<base_URI>/config/running/cee-map/{name}/precedence
<base_URI>/config/running/cee-map/{name}/priority-group-table/{PGID}
<base_URI>/config/running/cee-map/{name}/priority-table
<base_URI>/config/running/cee-map/{name}/remap
<base_URI>/config/running/cee-map/{name}/remap/lossless-priority

## Parameters

### *precedence*

Precedence value.

### *priority*

lossless-priority remapped CoS value

### *map-cos0-pgid*

Mapping CoS 0 to Priority Group Table. PGID 0-7,15.0-15.7;;

### *map-cos1-pgid*

Mapping CoS 1 to Priority Group Table. PGID 0-7,15.0-15.7;;

### *map-cos2-pgid*

Mapping CoS 2 to Priority Group Table. PGID 0-7,15.0-15.7;;

### *map-cos3-pgid*

Mapping CoS 3 to Priority Group Table. PGID 0-7,15.0-15.7;;

### *map-cos4-pgid*

Mapping CoS 4 to Priority Group Table. PGID 0-7,15.0-15.7;;

### *map-cos5-pgid*

Mapping CoS 5 to Priority Group Table. PGID 0-7,15.0-15.7;;

### *map-cos6-pgid*

Mapping CoS 6 to Priority Group Table. PGID 0-7,15.0-15.7;;

<i>map-cos7-pgid</i>	Mapping CoS 7 to Priority Group Table. PGID 0-7,15.0-15.7;;
<i>weight</i>	Configure DWRR Priority Group (PGID 0-7) weight
<i>pcf</i>	Per-priority Flow Control

## Usage Guidelines

GET, POST, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/cee-map/default

### Request Body

None

### Response Body

```
<cee-map xmlns="urn:brocade.com:mgmt:brocade-qos-cee" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/cee-map/default">
  <name>default</name>
  <precedence>1</precedence>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/1">
    <PGID>1</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.0">
    <PGID>15.0</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.1">
    <PGID>15.1</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.2">
    <PGID>15.2</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.3">
    <PGID>15.3</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.4">
    <PGID>15.4</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.5">
    <PGID>15.5</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.6">
    <PGID>15.6</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/15.7">
    <PGID>15.7</PGID>
  </priority-group-table>
  <priority-group-table y:self="/rest/config/running/cee-map/default/priority-group-table/2">
    <PGID>2</PGID>
  </priority-group-table>
  <priority-table y:self="/rest/config/running/cee-map/default/priority-table">
    <map-cos0-pgid>2</map-cos0-pgid>
    <map-cos1-pgid>2</map-cos1-pgid>
    <map-cos2-pgid>2</map-cos2-pgid>
    <map-cos3-pgid>1</map-cos3-pgid>
    <map-cos4-pgid>2</map-cos4-pgid>
    <map-cos5-pgid>2</map-cos5-pgid>
    <map-cos6-pgid>2</map-cos6-pgid>
    <map-cos7-pgid>15.0</map-cos7-pgid>
  </priority-table>
  <remap y:self="/rest/config/running/cee-map/default/remap">
    <lossless-priority y:self="/rest/config/running/cee-map/default/remap/lossless-priority">
      <priority>0</priority>
    </lossless-priority>
  </remap>
</cee-map>
```

The following is an example of the POST operation to create a configuration.

### *URI*

http://host:80/rest/config/running/

### *Request Body*

### *Response Body*

None

The following is an example of the DELETE operation to remove a configuration.

### *URI*

http://host:80/rest/config/running/

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.



# chassis

Configures, modifies, or retrieves the chassis virtual address.

## Resource URIs

URI	Description
<base_URI>/config/running/chassis	Chassis virtual address.

GET URIs	Description
<base_URI>/config/running/chassis	Displays chassis virtual address.
<base_URI>/config/running/chassis/virtual-ip	Displays chassis virtual IPv4 address.
<base_URI>/config/running/chassis/virtual-ipv6	Displays chassis virtual IPv6 address.

PATCH URIs	Payload	Description
<base_URI>/config/running/chassis	<chassis><virtual-ip>{string}</virtual-ip></chassis>	Modifies chassis virtual IPv4 address.
<base_URI>/config/running/chassis	<chassis><virtual-ipv6>{string}</virtual-ipv6></chassis>	Modifies chassis virtual IPv6 address.

PUT URIs	Payload	Description
<base_URI>/config/running/chassis/virtual-ip	<virtual-ip>{string}</virtual-ip>	Modifies chassis virtual IPv4 address
<base_URI>/config/running/chassis/virtual-ipv6	<virtual-ipv6>{string}</virtual-ipv6>	Modifies chassis virtual IPv6 address

POST URIs	Payload	Description
<base_URI>/config/running/chassis/virtual-ip	<virtual-ip>{string}</virtual-ip>	Configures chassis virtual IPv4 address
<base_URI>/config/running/chassis/virtual-ipv6	<virtual-ipv6>{string}</virtual-ipv6>	Configures virtual IPv6 address

DELETE URIs
<base_URI>/config/running/chassis/virtual-ip
<base_URI>/config/running/chassis/virtual-ipv6

## Parameters

### *virtual-ip*

Sets an IPv4 address in dotted-decimal notation with a CIDR prefix (mask).

### *virtual-ipv6*

Sets an IPv6 address in colon-separated hexadecimal notation with a CIDR prefix.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/chassis

### *Request Body*

None

### *Response Body*

```
<chassis xmlns="urn:brocade.com:mgmt:brocade-chassis" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/chassis">
  <virtual-ip>10.24.81.195/20</virtual-ip>
  <virtual-ipv6>2001:2017:111:1::/64</virtual-ipv6>
</chassis>
```

The following example uses the PATCH operation to set the virtual IPv4 address.

### *URI*

http://host:80/rest/config/running/chassis

### *Request Body*

```
<chassis>
  <virtual-ip>10.20.108.66/20</virtual-ip>
</chassis>
```

### *Response Body*

None

The following example uses the DELETE operation to remove the virtual IPv4 address.

**URI**

http://host:80/rest/config/running/chassis/virtual-ip

**Request Body**

None

**Response Body**

None

## History

Release version	History
17s.1.00	This API call was introduced.

# clock

Configures, modifies, or retrieves the system time zone.

## Resource URIs

URI	Description
<base_URI>/config/running/clock	Configures the system time zone.

GET URIs	Description
<base_URI>/config/running/clock	Configures the system time zone.
<base_URI>/config/running/clock/timezone	Time zone region or city. Regions are Africa, America, Antarctica, Arctic, Asia, Atlantic, Australia, Europe, Indian, and Pacific.

PATCH URIs	Payload	Description
<base_URI>/config/running/clock	<clock><timezone>{string}</timezone></clock>	Modifies or updates the system time zone.

PUT URIs	Payload	Description
<base_URI>/config/running/clock/timezone	<timezone>{string}</timezone>	Modifies or updates the system time zone.

DELETE URIs	Payload	Description
<base_URI>/config/running/clock/timezone	<timezone>{string}</timezone>	Deletes the system time zone.

## Parameters

*timezone*

Specifies the local clock time zone.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/clock

### *Request Body*

None

### *Response Body*

```
<clock xmlns="urn:brocade.com:mgmt:brocade-clock" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/clock">
  <timezone>Etc/GMT</timezone>
</clock>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# cluster/{cluster-name},{cluster-id}

Configures, retrieves, and modifies Multi-Chassis Trunking (MCT) cluster.

## Resource URIs

URI	Description
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	Configures MCT cluster.

GET URIs	Description
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	Displays MCT cluster-specific configuration.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member	Displays member VLAN or bridge-domain part of the MCT cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan	Displays MCT member VLAN.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan/add	Allows VLANs under MCT.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan/remove	Removes a VLAN range that Xmit/Rx through the Layer 2 interface.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/cluster-control-vlan	Displays MCT cluster control VLAN.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer-interface	Displays peer interface configuration.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer-interface/peer-if-name	Displays Peer Interface Name.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer/{peer-ip}	Displays cluster peer-related configuration.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-interfaces-shutdown	Disables the cluster client interfaces.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-isolation-strict	Configures cluster client isolation mode strict.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/df-load-balance	Configures designated forwarder load balance.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/designated-forwarder-hold-time	Time in seconds to wait before electing a designated forwarder.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/deploy	Deploys the cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}	Cluster client name for node-specific configuration.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/client-interface	Configures client interface.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/client-interface/if-value	Configures client interface name.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/esi	Configures cluster client ESI.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/deploy	Deploys cluster client.

POST URIs	Payload	Description
<base_URI>/config/running	<cluster><cluster-name>{common-def:name-string64}</cluster-name><cluster-id>{uint32}</cluster-id></cluster>	MCT cluster-specific configuration.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<peer><peer-ip>{inet:ipv4-address}</peer-ip></peer>	Cluster peer-related configuration.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<client><client-name>{string}</client-name><client-id>{uint32}</client-id></client>	Cluster client name for node-specific configuration.

PATCH URIs	Payload	Description
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan	<vlan><add>{ui32-vlan-range}</add></vlan>	Configures MCT member VLAN and allows VLANs under MCT.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan	<vlan><remove>{ui32-vlan-range}</remove></vlan>	Removes a VLAN range that Xmit/Rx through the Layer 2 interface.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<cluster><client-interfaces-shutdown>{enumeration}</client-interfaces-shutdown></cluster>	Disables the cluster client interfaces.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<cluster><client-isolation-strict>{enumeration}</client-isolation-strict></cluster>	Configures cluster client isolation mode strict.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<cluster><designated-forwarder-hold-time>{uint16}</designated-forwarder-hold-time></cluster>	Configures the time to wait before electing a designated forwarder, in seconds.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<cluster><deploy>{enumeration}</deploy></cluster>	Time in seconds to wait before electing a designated forwarder.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/client-interface	<client-interface><if-type>{enumeration}</if-type><if-value>{string-type}</if-value></client-interface>	Configures client Interface by specifying interface type and interface name.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}	<client><esi>{cluster-client-esi}</esi></client>	Configures cluster client ESI.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}	<client><deploy>{enumeration}</deploy></client>	Deploys cluster client.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/bridge-domain	<bridge-domain><add>{ui32-bd-range}</add></bridge-domain>	Adds a bridge domain or a range of bridge domains to the MCT cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/bridge-domain	<bridge-domain><remove>{ui32-bd-range}</remove></bridge-domain>	Removes configured bridge domains from the MCT cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<cluster><cluster-control-vlan>{uint16}</cluster-control-vlan></cluster>	Adds a VLAN or a range of VLANs to the MCT cluster. cluster-control-vlan: an integer from 1 through 4090.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer-interface	<peer-interface><peer-if-type>{enumeration}</peer-if-type><peer-if-name>{string-type}</peer-if-name></peer-interface>	Configures the Ethernet or port channel interface to reach the MCT cluster peer. The peer interface must be a Layer 2 interface. When it is configured, it is an internal switch port.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}	<cluster><df-load-balance>{enumeration}</df-load-balance></cluster>	Enables or disables designated forwarder (DF) load balancing.

PUT URIs	Payload	Description
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-interfaces-shutdown	<client-interfaces-shutdown>[enumeration]</client-interfaces-shutdown>	Disables the cluster client interfaces.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-isolation-strict	<client-isolation-strict>[enumeration]</client-isolation-strict>	Configures cluster client isolation mode strict.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/deploy	<deploy>[enumeration]</deploy>	Deploys the cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/deploy	<deploy>[enumeration]</deploy>	Deploys cluster client.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/designated-forwarder-hold-time	<designated-forwarder-hold-time>[uint16]</designated-forwarder-hold-time>	Time in seconds to wait before electing a designated forwarder.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan/add	<add>[ui32-vlan-range]</add>	Configures MCT member VLAN and allows VLANs under MCT.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/vlan/remove	<remove>[ui32-vlan-range]</remove>	Removes a VLAN range that Xmit/Rx through the Layer 2 interface.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/esi	<esi>[cluster-client-esi]</esi>	Configures cluster client ESI.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/client-interface	<client-interface><if-type>[enumeration]</if-type><if-value>[string-type]</if-value></client-interface>	Configures client interface by specifying interface type and interface name.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/bridge-domain/add	<add>[ui32-bd-range]</add>	Adds a bridge domain or a range of bridge domains to the MCT cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member/bridge-domain/remove	<remove>[ui32-bd-range]</remove>	Removes configured bridge domains from the MCT cluster.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/cluster-control-vlan	<cluster-control-vlan>[uint16]</cluster-control-vlan>	Adds a VLAN or a range of VLANs to the MCT cluster. cluster-control-vlan: an integer from 1 through 4090.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer-interface	<peer-interface><peer-if-type>[enumeration]</peer-if-type><peer-if-name>[string-type]</peer-if-name></peer-interface>	Configures the Ethernet or port channel interface to reach the MCT cluster peer. The peer interface must be a Layer 2 interface. When it is configured, it is an internal switch port.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/df-load-balance	<df-load-balance>[enumeration]</df-load-balance>	Enables or disables designated forwarder (DF) load balancing.

DELETE URIs
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/cluster-control-vlan
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer-interface
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer/{peer-ip}
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-interfaces-shutdown
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-isolation-strict
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/df-load-balance
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/designated-forwarder-hold-time
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/deploy



DELETE URIs
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/client-interface
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/client-interface/if-value
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/esi
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/deploy
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/peer/{inet:ipv4-address}
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member-vlan/remove

## Parameters

### *designated-forwarder-hold-time*

Time in seconds to wait before electing a designated forwarder. Range: 1-60 seconds.

### *df-load-balance*

Enables or disables designated forwarder (DF) load balancing. df-load-balance.

### *remove*

An individual bridge domain and a range of bridge domains. To specify a range of bridge domain, insert a hyphen between the beginning and ending integers (for example, 5-16). To specify individual and ranges of bridge domains, separate them by commas (for example,1,2,4-7,8,9-22,55-66). You can enter a maximum of 253 characters.

### *add*

An individual bridge domain and a range of bridge domains. To specify a range of bridge domain, insert a hyphen between the beginning and ending integers (for example, 5-16). To specify individual and ranges of bridge domains, separate them by commas (for example,1,2,4-7,8,9-22,55-66). You can enter a maximum of 253 characters.

### *peer-if-type*

Specifies the time in seconds to wait before electing a designated forwarder.

### *peer-if-name*

Specifies the time in seconds to wait before electing a designated forwarder.

### *cluster-control-vlan*

VLANs on which MCT clients are operating. Allowed values: an integer from 1 through 4090.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/cluster/{SQAFREEDOMCLUSTER},{65535}

### Request Body

None

### Response Body

```
<cluster xmlns="urn:brocade.com:mgmt:brocade-mct" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/cluster/SQAFREEDOMCLUSTER%2C65535">
  <cluster-name>SQAFREEDOMCLUSTER</cluster-name>
  <cluster-id>65535</cluster-id>
  <member y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/member">
    <vlan y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/member/vlan">
      <add>1-49,51-2000</add>
    </vlan>
    <bridge-domain y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/member/bridge-domain">
      <add>4000-4096</add>
    </bridge-domain>
  </member>
  <cluster-control-vlan>4000</cluster-control-vlan>
  <peer-interface y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/peer-interface">
    <peer-if-type>Port-channel</peer-if-type>
    <peer-if-name>1024</peer-if-name>
  </peer-interface>
  <peer y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/peer/50.50.50.1">
    <peer-ip>50.50.50.1</peer-ip>
  </peer>
  <deploy>true</deploy>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/DoubleToCedar%2C15">
    <client-name>DoubleToCedar</client-name>
    <client-id>15</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToCastor%2C1">
    <client-name>ToCastor</client-name>
    <client-id>1</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToCedar1%2C50">
    <client-name>ToCedar1</client-name>
    <client-id>50</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToCedar2%2C500">
    <client-name>ToCedar2</client-name>
    <client-id>500</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToESX241S25G%2C25">
    <client-name>ToESX241S25G</client-name>
    <client-id>25</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToESXServer231%2C231">
    <client-name>ToESXServer231</client-name>
    <client-id>231</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToESXServer232%2C232">
    <client-name>ToESXServer232</client-name>
    <client-id>232</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToF3Scale%2C33">
    <client-name>ToF3Scale</client-name>
```

```

    <client-id>33</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB205_1G_one%2C251">
    <client-name>ToRB205_1G_one</client-name>
    <client-id>251</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB205_1G_two%2C252">
    <client-name>ToRB205_1G_two</client-name>
    <client-id>252</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB206%2C261">
    <client-name>ToRB206</client-name>
    <client-id>261</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB2062%2C262">
    <client-name>ToRB2062</client-name>
    <client-id>262</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB2063%2C263">
    <client-name>ToRB2063</client-name>
    <client-id>263</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB2064%2C264">
    <client-name>ToRB2064</client-name>
    <client-id>264</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB2065%2C265">
    <client-name>ToRB2065</client-name>
    <client-id>265</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/ToRB207%2C512">
    <client-name>ToRB207</client-name>
    <client-id>512</client-id>
  </client>
  <client y:self="/rest/config/running/cluster/SQAFREEDOMCLUSTER%2C65535/client/
ToServer49.234_Mellanoc_25G%2C234">
    <client-name>ToServer49.234_Mellanoc_25G</client-name>
    <client-id>234</client-id>
  </client>
</cluster>

```

The following example uses the POST option to perform MCT cluster-specific configuration.

## URI

http://host:80/rest/config/running/

## Request Body

```
<cluster><cluster-name>ScaleFREEDOMCLUSTER</cluster-name><cluster-id>6</cluster-id></cluster>
```

## Response Body

None

cluster/{cluster-name},{cluster-id}

The following example uses the DELETE option to remove an MCT cluster.

### *URI*

http://host:80/rest/config/running/cluster/ScaleFREEDOMCLUSTER,6

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# dot1x

Configures, retrieves, and modifies 802.1X authentication.

## Resource URIs

URI	Description
<base_URI>/config/running/dot1x	Configures 802.1X authentication.

GET URIs	Description
<base_URI>/config/running/dot1x	IEEE 802.1X port-based access control.
<base_URI>/config/running/dot1x/enable	Enables global port authentication.
<base_URI>/config/running/dot1x/test	Configures 802.1X readiness check.
<base_URI>/config/running/dot1x/test/timeout	Configures timeout for dot1x readiness check

PATCH URIs	Payload	Description
<base_URI>/config/running/dot1x	<dot1x><enable>(enumeration)</enable></dot1x>	Configures IEEE 802.1X port-based access control and enables global port authentication.
<base_URI>/config/running/dot1x/test	<test><timeout>{dot1x-readiness-test-timeout-interval}</timeout></test>	Configures timeout for dot1x readiness check.

PUT URIs	Payload	Description
<base_URI>/config/running/dot1x/enable	<enable>(enumeration)</enable>	Enables global port authentication.
<base_URI>/config/running/dot1x/test/timeout	<timeout>{dot1x-readiness-test-timeout-interval}</timeout>	Configures timeout for dot1x readiness check.

DELETE URIs
<base_URI>/config/running/dot1x/enable
<base_URI>/config/running/dot1x/test/timeout

## Parameters

### *test timeout*

Specifies the readiness test interval value in seconds. Valid values range from 1 through 65535. The default readiness test interval is 10 seconds.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/dot1x

### *Request Body*

None

### *Response Body*

```
<dot1x xmlns="urn:brocade.com:mgmt:brocade-dot1x" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/dot1x">
  <enable>true</enable>
  <test y:self="/rest/config/running/dot1x/test">
    <timeout>11</timeout>
  </test>
</dot1x>
```

The following example uses the PATCH option to configure dot1x.

### *URI*

http://host:80/rest/config/running/dot1x

### *Request Body*

```
<dot1x><enable>true</enable></dot1x>
```

### *Response Body*

None

The following example uses the DELETE option to remove dot1x.

### *URI*

http://host:80/rest/config/running/dot1x/enable

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# filter-change-update-delay

Configures, retrieves, and modifies the filter change update delay timer.

## Resource URIs

URI	Description
<base_URI>/config/running/filter-change-update-delay/{filter-delay-value}	Configures filter change update delay timer.

GET URI	Description
<base_URI>/config/running/filter-change-update-delay/{filter-delay-value}	Retrieves filter change update delay timer.

POST URI	Payload	Description
<base_URI>/config/running/filter-change-update-delay/{filter-delay-value}	<filter-change-update-delay><filter-delay-value>{uint32}</filter-delay-value></filter-change-update-delay>	Configures filter change update delay timer.

DELETE URIs
<base_URI>/config/running/filter-change-update-delay/{filter-delay-value}

## Parameters

### *filter-delay-value*

Specifies the filter change update delay time in seconds. Valid values are from 0 through 600. Default value is 10 seconds.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/filter-change-update-delay

### Request Body

None

### Response Body

```
<filter-change-update-delay xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://
brocade.com/ns/rest" y:self="/rest/config/running/filter-change-update-delay/500">
  <filter-delay-value>500</filter-delay-value>
</filter-change-update-delay>
```

The following example uses the POST option to configure the filter change update delay value.

### URI

http://host:80/rest/config/running/filter-change-update-delay/15

### Request Body

```
<filter-change-update-delay><filter-delay-value>500</filter-delay-value></filter-change-update-delay>
```

### Response Body

None

The following example uses the DELETE option to remove filter change update delay timer value setting.

### URI

http://host:80/rest/config/running/filter-change-update-delay/500

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# hardware

Configures, modifies, or retrieves the hardware management configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/hardware	Hardware management configuration
<base_URI>/config/running/hardware/connector	Configures a connector.
<base_URI>/config/running/hardware/port-group	Configures a port-group.

GET URIs	Description
<base_URI>/config/running/hardware	Hardware management configuration.
<base_URI>/config/running/hardware/connector/(connectorName)	Configures a connector with the specified name.
<base_URI>/config/running/hardware/connector/(connectorName)/breakout	Configures a breakout connector.
<base_URI>/config/running/hardware/connector/(connectorName)/breakout/mode	Configures connector mode.
<base_URI>/config/running/hardware/port-group/(portGroupName)	Configures a port-group in a specified name.
<base_URI>/config/running/hardware/port-group/(portGroupName)/mode	Configures port-group mode.

POST URIs	Payload	Description
<base_URI>/config/running	<hardware />	Hardware management configuration
<base_URI>/config/running/hardware	<connector><name>(connectorName)</name></connector>	Configures a connector.
<base_URI>/config/running/hardware/connector/(connectorName)	<breakout />	Configures a breakout connector.
<base_URI>/config/running/hardware	<port-group><name>(portGroupName)</name></port-group>	Configures a port-group.

PATCH URIs	Payload	Description
<base_URI>/config/running/hardware/connector/(connectorName)/breakout	<breakout><mode>(mode)</mode></breakout>	Configures a breakout connector.
<base_URI>/config/running/hardware/port-group/(portGroupName)	<port-group><mode>(mode)</mode></port-group>	Configures a port-group in a specified name.

DELETE URIs	Payload	Description
<base_URI>/config/running/hardware/connector/(connectorName)/breakout	<breakout><mode>(mode)</mode></breakout>	Configures a breakout connector.

## Parameters

*connector*

Configures a connector.

*port-group*

Configures a port group.

## Usage Guidelines

GET, POST, PUT, PATCH, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

`http://host:80/rest/config/running/hardware`

### Request Body

None

### Response Body

```
<hardware xmlns="urn:brocade.com:mgmt:brocade-hardware" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/hardware">
  <profile y:self="/rest/config/running/hardware/profile">
    <tcam y:self="/rest/config/running/hardware/profile/tcam">
      <tcam_profiletype>default</tcam_profiletype>
    </tcam>
    <lag y:self="/rest/config/running/hardware/profile/lag">
      <lag_profiletype>default</lag_profiletype>
    </lag>
    <counters y:self="/rest/config/running/hardware/profile/counters">
      <counters_profiletype>default</counters_profiletype>
    </counters>
  </profile>
  <port-group y:self="/rest/config/running/hardware/port-group/%221/4%22">
    <name>1/4</name>
    <mode>100g</mode>
  </port-group>
</hardware>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/bfd

Configures, modifies, or retrieves Bidirectional Forwarding Detection (BFD) sessions on an interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd	Creates BFD session on this interface. Valid interface types: Ethernet and VE.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd	Creates BFD session on an interface. Valid interface types: Ethernet and VE.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/interval	Configures BFD desired minimum transmit interval in milliseconds. Valid interface types: Ethernet and VE.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/interval/multiplier	Configures BFD detection time multiplier. Valid interface types: Ethernet and VE.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/shutdown	Administratively shuts down the BFD session. Valid interface types: Ethernet and VE.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd	<bfd><shutdown>{enumeration}</shutdown></bfd>	Administratively shuts down the BFD session. Valid interface types: Ethernet and VE.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier. Valid interface types: Ethernet and VE.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier. Valid interface types: Ethernet and VE.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/shutdown	<shutdown>{enumeration}</shutdown>	Administratively shuts down the BFD session. Valid interface types: Ethernet and VE.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/bfd/shutdown

## Parameters

*interface-type*

Valid interface types: Ethernet and VE.

interface/{interface-type}/{interface-name}/bfd

*min-tx*

The BFD desired min transmit interval in milliseconds.

*min-rx*

The BFD required min receive interval in milliseconds.

*interval*

The BFD desired min transmit interval in milliseconds.

*multiplier*

The BFD detection time multiplier.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

### Examples

The following example uses the GET option to retrieve the BFD configuration details.

#### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/bfd

#### *Request Body*

None

#### *Response Body*

```
<bfd xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/10%22/bfd">
  <interval y:self="/rest/config/running/interface/Ethernet/%220/10%22/bfd/interval">
    <min-tx>80</min-tx>
    <min-rx>80</min-rx>
    <multiplier>8</multiplier>
  </interval>
  <shutdown>false</shutdown>
</bfd>
```

The following example uses the PATCH option to configure BFD.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/bfd

### *Request Body*

```
<bfd><interval><min-tx>80</min-tx><min-rx>80</min-rx><multiplier>8</multiplier></interval></bfd>
```

### *Response Body*

None

The following example uses the DELETE option to remove the BFD configuration.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/bfd

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/channel-group

Configures the Link Aggregation Control Protocol (LACP) channel.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group	Displays channel group details. Supported interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group	Displays channel group details. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group/mode	Displays channel group mode. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group/type	Displays channel group type. Supported interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group	<channel-group><port-int>{portchannel-type}</port-int><mode>{po-mode}</mode></channel-group>	Configures channel group. Supported interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group	<channel-group><port-int>{portchannel-type}</port-int><mode>{po-mode}</mode></channel-group>	Configures channel group. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group	<channel-group><type>{po-type}</type></channel-group>	Configures port mode. Supported interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/channel-group

## Parameters

### *interface-type*

The interface type. Allowed value: Ethernet.

### *channel-group*

LACP Channel group.

### *port-int*

Channel group number.



<i>mode</i>	The mode of the port channel. Allowed values are on, active or passive.
<i>type</i>	The type of the port-channel.

## Usage Guidelines

GET, POST, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/channel-group/

### Request Body

None

### Response Body

```
<channel-group xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%220/10%22/channel-group">
  <port-int>10</port-int>
  <mode>active</mode>
  <type>standard</type>
</channel-group>
```

The following example uses the PATCH option to configure a channel group.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/channel-group

### Request Body

```
<channel-group><port-int>10</port-int><mode>active</mode><type>standard</type></channel-group>
```

### Response Body

None

interface/{interface-type}/{interface-name}/channel-group

The following example uses the DELETE option to remove the channel-group configuration.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/channel-group/

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/delay-link-event

Configures, modifies, or retrieves a delay-link-event.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/delay-link-event	Configures a delay-link-event. Supported interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/delay-link-event	Displays the delay for an event. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/delay-link-event/delay-link-event-type	Displays the type of delay-link-event. Supported interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/delay-link-event/delay-link-event-entry	<delay-link-event-entry>15</delay-link-event-entry>	Updates the delay link event entry value. Supported interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/delay-link-event

## Parameters

*interface-type*

Valid interface type: **Ethernet** only. The delayed-link-event configuration is applicable only on a physical interface.

*delay-link-event-entry*

Specifies the number of times that the polling iteration occurs. Range is an integer from 1 to 200.

*delay-link-event-type*

Specifies the delay link event type. Valid values are **up** (port up event), **port down** (down event), or **both** (port up or port down event).

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/delay-link-event

### Request Body

None

### Response Body

```
<delay-link-event xmlns="urn:brocade.com:mgmt:brocade-dle" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%221/1%22/delay-link-event">
  <delay-link-event-entry>3</delay-link-event-entry>
  <delay-link-event-type>both</delay-link-event-type>
</delay-link-event>
```

The following example uses the PUT operation to update the delay time.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/delay-link-event/delay-link-event-entry

### Request Body

```
<delay-link-event-entry>15</delay-link-event-entry>
```

### Response Body

None

The following example uses the DELETE operation to remove the delay-link-event configuration.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/delay-link-event

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/dot1x

Configures, retrieves, and modifies 802.1X authentication.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	Configures 802.1X authentication. Supported interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	IEEE 802.1X port-based access control. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/authentication	Enables dot1x authentication on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/port-control	Allows port client to negotiate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/quiet-period	Configures time interval in seconds that the device remains idle between a failed authentication and a reauthentication attempt. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/reauthMax	Sets maximum count that a port attempts 802.1x reauthentication before the port changes to the unauthorized state. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/max-req	Sets retransmission parameter that defines the maximum number of times EAP request/challenge frames are retransmitted when EAP response/identity frame is not received from the client. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/reauthentication	Enables reauthentication on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/filter-strict-security	Enables strict mode on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout	Sets a timeout parameter. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/re-authperiod	Sets reauthentication interval in seconds. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/supp-timeout	Sets supplicant response timeout (default = 30). Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/tx-period	Sets transmission period in seconds (default = 30). Supported interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><authentication>{enumeration}</authentication></dot1x>	Configures IEEE 802.1X port-based access control and enables dot1x authentication on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><port-control>{enumeration}</port-control></dot1x>	Allows port client to negotiate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><quiet-period>{uint32}</quiet-period></dot1x>	Configures time interval in seconds that the device remains idle between a failed authentication and a reauthentication attempt. Supported interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><reauthMax>{uint32}</reauthMax></dot1x>	Sets maximum count that a port attempts 802.1x reauthentication before the port changes to the unauthorized state. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><max-req>{uint32}</max-req></dot1x>	Sets retransmission parameter that defines the maximum number of times EAP request/challenge frames are retransmitted when EAP response/identity frame is not received from the client. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><reauthentication>(enumeration)</reauthentication></dot1x>	Enables reauthentication on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x	<dot1x><filter-strict-security>true</filter-strict-security></dot1x>	Enables strict mode on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout	<timeout><re-authperiod>{dot1x-reauth-timeout-interval}</re-authperiod></timeout>	Sets reauthentication interval in seconds. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout	<timeout><supp-timeout>{dot1x-supp-timeout-interval}</supp-timeout></timeout>	Sets supplicant response timeout (default = 30). Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout	<timeout><tx-period>{dot1x-tx-timeout-interval}</tx-period></timeout>	Sets transmission period in seconds (default = 30). Supported interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/authentication	<authentication>(enumeration)</authentication>	Configures IEEE 802.1X port-based access control and enables dot1x authentication on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/port-control	<port-control>(enumeration)</port-control>	Allows port client to negotiate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/quiet-period	<quiet-period>{uint32}</quiet-period>	Configures time interval in seconds that the device remains idle between a failed authentication and a reauthentication attempt. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/reauthMax	<reauthMax>{uint32}</reauthMax>	Sets maximum count that a port attempts 802.1x reauthentication before the port changes to the unauthorized state. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/max-req	<max-req>{uint32}</max-req>	Sets retransmission parameter that defines the maximum number of times EAP request/challenge frames are retransmitted when EAP response/identity frame is not received from the client. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/reauthentication	<reauthentication>(enumeration)</reauthentication>	Enables reauthentication on a port. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/filter-strict-security	<filter-strict-security>(enumeration)</filter-strict-security>	Enables strict mode on a port. Supported interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/re-authperiod	<re-authperiod>{dot1x-reauth-timeout-interval}</re-authperiod>	Sets reauthentication interval in seconds. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/supp-timeout	<supp-timeout>{dot1x-supp-timeout-interval}</supp-timeout>	Sets supplicant response timeout (default = 30). Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/tx-period	<tx-period>{dot1x-tx-timeout-interval}</tx-period>	Sets transmission period in seconds (default = 30). Supported interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/authentication
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/port-control
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/quiet-period
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/reauthMax
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/max-req
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/reauthentication
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/filter-strict-security
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/re-authperiod
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/supp-timeout
<base_URI>/config/running/interface/{interface-type}/{interface-name}/dot1x/timeout/tx-period

## Parameters

### *interface-type*

Supported interface type: Ethernet only.

### *quiet-period*

Specifies the time between failed reauthentication and reauthentication attempt. Valid values range from 1 through 65535 seconds. The default quiet period is 60 seconds.

### *reauthMax*

Specifies the maximum number of reauthentication attempts before the port goes to the unauthorized state. Valid values range from 1 through 10. The default value is 2.

### *max-req*

Specifies the number of EAP frame retransmissions. The range is from 1 through 10. The default value is 2.

### *re-authperiod*

Specifies the interval at which clients connected to 802.1X authentication-enabled ports are periodically reauthenticated.

### *supp-timeout*

Specifies the EAP response timeout for 802.1x authentication. By default, when the Brocade device relays an EAP-Request frame from the RADIUS server to the client, it expects to receive a response from the client within 30 seconds. If the client does not respond within the allotted time, the device retransmits the EAP-Request frame to the client.



### *tx-timeout*

Specifies the EAP request retransmission interval, in seconds, with the client. By default, if the Brocade device does not receive an EAP-response/identity frame from a client, the device waits 30 seconds, then retransmits the EAP-request/identity frame. You can optionally change the amount of time the Brocade device waits before re-transmitting the EAP-request/identity frame to the client. If the client does not send back an EAP-response/identity frame within 60 seconds, the device will transmit another EAP-request/identity frame. The tx-period is a value from 1 through 4294967295. The default is 30 seconds.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/dot1x

### *Request Body*

None

### *Response Body*

```
<dot1x xmlns="urn:brocade.com:mgmt:brocade-dot1x" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/interface/Ethernet/%221/3%22/dot1x">
  <authentication>true</authentication>
  <port-control>force-unauthorized</port-control>
  <protocol-version>1</protocol-version>
  <quiet-period>3</quiet-period>
  <reauthMax>1</reauthMax>
  <max-req>6</max-req>
  <reauthentication>true</reauthentication>
  <filter-strict-security>true</filter-strict-security>
  <timeout y:self="/rest/config/running/interface/Ethernet/%221/3%22/dot1x/timeout">
    <re-authperiod>7</re-authperiod>
    <supp-timeout>8</supp-timeout>
    <tx-period>9</tx-period>
  </timeout>
</dot1x>
```

interface/{interface-type}/{interface-name}/dot1x

The following example uses the PATCH option to configure dot1x authentication.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/dot1x

### *Request Body*

```
<dot1x><authentication>true</authentication></dot1x>
```

### *Response Body*

None

The following example uses the DELETE option to remove dot1x authentication.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/dot1x/authentication

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip

Configures, retrieves, and modifies an IP address on an interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip	Configures an IP address on an interface.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip	Configures an IP address on an interface. Allowed interface types: Management, Ethernet, Port-channel, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/address	Specifies the IP address. Allowed interface types: Management, Management, Ethernet, Port-channel, Ve, Loopback.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/	<shutdown>[enumeration]</shutdown>	Shuts down the interface.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip	<address><address>[inet:ipv4-prefix]</address></address>	Specifies the mask for the associated IP subnet. Allowed interface types: Ethernet, Ve, Loopback.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/address	<address><address>[inet:ipv4-prefix]</address></address>	Specifies the mask for the associated IP subnet. Allowed interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/shutdown	<shutdown>[enumeration]</shutdown>	Shuts down the interface. Allowed interface types: Ethernet, Port-channel, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip
<base_URI>/config/running/interface/{interface-type}/{interface-name}/shutdown
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/mtu

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve an IP address.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/ip/address

### *Request Body*

None

### *Response Body*

```
<address xmlns="urn:brocade.com:mgmt:brocade-ip-config" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/address/%2210.20.1.1/20%22">
  <address>10.20.1.1/20</address>
</address>
```

The following example uses the PATCH option to configure an IP address on an interface.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/ip/address

### *Request Body*

```
<address><address>10.20.1.1/20</address></address>
```

### *Response Body*

None

The following example uses the DELETE option to remove an IP address on an interface.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/ip/address

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/ access-group

Configures, modifies, or retrieves the Internet Protocol (IP) access group.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group	Configures IP access group.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}	Displays IP direction. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}	Displays switched traffic only status. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}/traffic-type	Displays IP direction. Valid interface type: Management only.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip	:<access-group><ip-access-list>{l3-acl-policy-name}</ip-access-list><ip-direction>{enumeration}</ip-direction></access-group>	Configures IP access group. Valid interface types: Ethernet, Port-channel, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}/traffic-type	<traffic-type>{enumeration}</traffic-type>	Enables Switched traffic only. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group	<access-group><mgmt-ip-access-list>{l3-acl-policy-name}</mgmt-ip-access-list><mgmt-ip-direction>{enumeration}</mgmt-ip-direction></access-group>	Configures IP direction. Valid interface type: Management only.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}	<access-group><traffic-type>{enumeration}</traffic-type></access-group>	Configures IP access group. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group	<access-group><mgmt-ip-access-list>{l3-acl-policy-name}</mgmt-ip-access-list><mgmt-ip-direction>{enumeration}</mgmt-ip-direction></access-group>	Configures IP receive access group. Valid interface type: Management only.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}

**DELETE URIs**

```
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/access-group/{ip-access-list}/{ip-direction}/traffic-type
```

## Parameters

*ip-access-list*

Specifies the ACL name.

*ip-direction*

Specifies the IP direction. Supported configurations are in and out. Configuring in sets the ACL binding direction as ingress. Configuring out sets the ACL binding direction as egress.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

**NOTE**

An IP access list must be created before configuring the interface IP access group.

## Examples

The following example uses the GET option to retrieve the configuration details.

**URI**

```
http://host:80/rest/config/running/interface/ethernet/%221/1%22/ip/access-group
```

**Request Body**

None

**Response Body**

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-ip-access-list" y:self="/rest/config/running/
interface/Ethernet/%221/1%22/ip/access-group/acl%2Cin">
  <ip-access-list>acl</ip-access-list>
  <ip-direction>in</ip-direction>
</access-group>
```

The following is an example of the POST operation to add an access-group.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/ip

### Request Body

```
<access-group>
  <ip-access-list>acl8</ip-access-list>
  <ip-direction>in</ip-direction>
</access-group>
```

### Response Body

None

The following is an example of the DELETE operation to remove the access-group configuration.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/ip/access-group

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.



# interface/{interface-type}/{interface-name}/ip/arp-aging-timeout

Configures Address Resolution Protocol (ARP) aging timeout.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/arp-aging-timeout	Configures ARP aging timeout. Valid interface types: Ethernet, Ve.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/arp-aging-timeout	Configures ARP aging timeout. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/arp-aging-timeout	<arp-aging-timeout>(unit32)</arp-aging-timeout>	Configures ARP aging timeout in minutes. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/arp-aging-timeout	<arp-aging-timeout>(unit32)</arp-aging-timeout>	Configures ARP aging timeout in minutes. Valid interface types: Ethernet, Ve.

## Parameters

*interface-type*

Valid interface types: **Ethernet** and **Ve**.

*arp-aging-timeout*

Specifies the ARP aging timeout in minutes. The range is from 0 to 240.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%223/14%22/ip/arp-aging-timeout

### Request Body

None

### Response Body

```
<arp-aging-timeout xmlns="urn:brocade.com:mgmt:brocade-ip-config" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%223/14%22/ip/arp-aging-timeout">10</arp-aging-timeout>
```

The following example uses the PATCH option to configure the ARP aging timeout.

### URI

http://host:80/rest/config/running/interface/ethernet/%223/14%22/ip/arp-aging-timeout

### Request Body

```
<arp-aging-timeout>20</arp-aging-timeout>
```

### Response Body

None

The following example uses the DELETE option to remove the ARP aging timeout.

### URI

http://host:80/rest/config/running/interface/ethernet/%223/14%22/ip/arp-aging-timeout

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway

Configures Dynamic Host Configuration Protocol [DHCP] relay gateway.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway	Configures DHCP relay gateway. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway	Displays DHCP relay gateway configuration. Valid interface types: Ethernet, Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay	<gateway>{ip-address}</gateway>	Configures DHCP relay gateway. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway	<gateway>{ip-address}</gateway>	Configures DHCP relay gateway. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway	<gateway>{ip-address}</gateway>	Configures DHCP relay gateway. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/gateway

## Parameters

*interface-type*

Valid interface types: **E**thernet and **V**e.

*address*

IP address of the gateway.

## Usage Guidelines

GET, POST, PATCH, PUT, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ve/11/ip/dhcp/relay/gateway

### Request Body

None

### Response Body

```
<gateway xmlns="urn:brocade.com:mgmt:brocade-dhcp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ve/11/ip/dhcp/relay/gateway">11.1.2.1</gateway>
```

The following example uses the POST option to configure DHCP relay gateway.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/10%22/ip/dhcp/relay

### Request Body

```
<gateway>10.10.10.10</gateway>
```

### Response Body

None

The following example uses the DELETE option to remove DHCP relay gateway.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/10%22/ip/dhcp/relay/gateway

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers

Configures Dynamic Host Configuration Protocol (DHCP) relay servers.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay	Configures DHCP relay servers. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay	Retrieves DHCP relay configurations. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers	Retrieves DHCP relay server information. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers/address	Retrieves DHCP relay server address. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers/address/{ip-address}/use-vrf	Retrieves DHCP relay server address and VRF information. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers/address/{ip-address}/use-vrf/{vrf-name}	Retrieves DHCP relay server address and VRF information. Valid interface types: Ethernet, Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay	<servers><address>(ip-address_</address><use-vrf>(vrf-name)</use-vrf></servers>	Configures DHCP relay server. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/dhcp/relay/servers/address/{ip-address}

## Parameters

*interface-type*

Valid interface types: **Ethernet** and **Ve**.

*address*

IP address of the server.

*use-vrf*

Specifies the VRF name.

## Usage Guidelines

GET, POST, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ve/11/ip/dhcp/relay/servers

### Request Body

None

### Response Body

```
<servers xmlns="urn:brocade.com:mgmt:brocade-dhcp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ve/11/ip/dhcp/relay/servers/21.1.1.10%2C.">
  <address>21.1.1.10</address>
  <use-vrf>.</use-vrf>
</servers>
<servers xmlns="urn:brocade.com:mgmt:brocade-dhcp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ve/11/ip/dhcp/relay/servers/31.1.1.10%2CRED">
  <address>31.1.1.10</address>
  <use-vrf>RED</use-vrf>
</servers>
```

The following example uses the POST option to configure DHCP relay server.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/10%22/ip/dhcp/relay

### Request Body

```
<servers>
  <address>10.10.10.10</address>
  <use-vrf>vrf1</use-vrf>
</servers>
```

### Response Body

None

The following example uses the DELETE option to remove DHCP relay server.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%221/10%22/ip/dhcp/relay/servers/address/10.10.10.10

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/ospf/bfd

Configures, modifies, or retrieves Bidirectional Forwarding Detection (BFD) information for an interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd	Configures, modifies, or retrieves BFD information for an interface. Valid interface types: Ethernet, Loopback, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd	Retrieves BFD operation mode details. Valid interface types: Ethernet, Loopback, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd/bfd-enable	Returns "true" if BFD operation mode is enabled on this interface. Valid interface types: Ethernet, Loopback, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd	<bfd><intf-bfd-enable>{enumeration}</intf-bfd-enable></bfd>	Enables BFD operation mode on this interface. Valid interface types: Ethernet, Loopback, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd/intf-bfd-enable	<intf-bfd-enable>{enumeration}</intf-bfd-enable>	Enables BFD operation mode on this interface. Valid interface types: Ethernet, Loopback, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/ospf/bfd/intf-bfd-enable

## Parameters

*interface-type*

Allowed values are Ethernet, Loopback, and Ve.

*intf-bfd-enable*

Enables BFD: Boolean variable.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf

### Request Body

None

### Response Body

```
<ospf xmlns="urn:brocade.com:mgmt:brocade-ospf" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf">
  <area>1.1.1.1</area>
  <authentication-key y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf/authentication-key">
    </authentication-key>
  <md5-authentication y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf/md5-authentication">
    <key-id y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf/md5-authentication/key-id">
      </key-id>
    </md5-authentication>
  <database-filter y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf/database-filter">
    <all-out>>false</all-out>
  </database-filter>
  <mtu-ignore>>false</mtu-ignore>
  <active>>false</active>
  <passive>>false</passive>
  <bfd y:self="/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf/bfd">
    <intf-bfd-enable>>false</intf-bfd-enable>
  </bfd>
</ospf>
```

The following example uses the PATCH option to configure OSPF area.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf

### Request Body

```
<ospf><area>1.1.1.1</area></ospf>
```

### Response Body

None

interface/{interface-type}/{interface-name}/ip/ospf/bfd

The following example uses the DELETE option to remove the OSPF configuration.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/ip/ospf

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/policy

Configures, modifies, or retrieves the Policy-based Routing (PBR) configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy	Configures PBR. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy	Displays PBR configuration. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map	Displays route-map status. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map/route-map-name	Displays route-map name. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map	<route-map><route-map-name>{common-def:name-string63}</route-map-name></route-map>	Configures PBR. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map/route-map-name	<route-map-name>{common-def:name-string63}</route-map-name>	Configures PBR. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map/route-map-name

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ip/policy

### Request Body

None

### Response Body

```
<policy y:self="/rest/config/running/interface/ethernet/%22195/7%22/ip/policy">
  <route-map y:self="/rest/config/running/interface/ethernet/%22195/7%22/ip/policy/route-map">
    <route-map-name>map12</route-map-name>
  </route-map>
</policy>
```

The following is an example of the PUT operation to configure a route map.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ip/policy/route-map

### Request Body

```
<route-map>
  <route-map-name>map12</route-map-name>
</route-map>
```

### Response Body

None

The following is an example of the DELETE operation to remove a route map.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ip/policy/route-map/map12

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/proxy-arp

Configures Proxy-ARP on the interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/proxy-arp	Configures Proxy-ARP on the interface. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/proxy-arp	Retrieves Proxy-ARP configuration. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/proxy-arp	<proxy-arp>true</proxy-arp>	Enables Proxy-ARP on interface. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/proxy-arp	<proxy-arp>true</proxy-arp>	Enables Proxy-ARP on interface. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/proxy-arp

## Parameters

*interface-type*

Valid interface types: **Ethernet** and **Ve**.

*proxy-arp*

Enables Proxy-ARP on the interface.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running//interface/ethernet/%223/14%22/ip/proxy-arp

### Request Body

None

### Response Body

```
<proxy-arp xmlns="urn:brocade.com:mgmt:brocade-ip-config" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%223/14%22/ip/proxy-arp">true</proxy-arp>
```

The following example uses the PATCH option to configure Proxy-ARP on an Ethernet interface.

### URI

http://host:80/rest/config/running//interface/ethernet/%223/14%22/ip/proxy-arp

### Request Body

```
<proxy-arp>true</proxy-arp>
```

### Response Body

None

The following example uses the DELETE option to remove Proxy-ARP from an Ethernet interface.

### URI

http://host:80/rest/config/running//interface/ethernet/%223/14%22/ip/proxy-arp

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ip/vrrp-extended

Configures, retrieves, and modifies Virtual Router Redundancy Protocol Extended (VRRP-E).

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended	Configures VRRP-E. Valid interface type: Ve.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended	Displays ip configuration. Valid interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type	Displays authentication type. Valid interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type/md5-auth	Displays md5 authentication. Valid interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type/md5-auth/auth-data	Displays authentication data. Valid interface type: Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type/md5-auth/auth-data	<auth-data>{string}</auth-data>	Configures Authentication data. Valid interface type: Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/ve/{name}/ip/vrrp-extended/auth-type/md5-auth	<md5-auth><auth-data>{string}</auth-data></md5-auth>	Configures MD5 authentication. Valid interface type: Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type/md5-auth
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended/auth-type/md5-auth/auth-data

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ve/2/ip/vrrp-extended

### Request Body

None

### Response Body

```
<vrrp-extended xmlns="urn:brocade.com:mgmt:brocade-vrrp" y:self="/rest/config/running/interface/Ve/2/ip/vrrp-extended">
  <auth-type y:self="/rest/config/running/interface/Ve/2/ip/vrrp-extended/auth-type">
    <md5-auth y:self="/rest/config/running/interface/Ve/2/ip/vrrp-extended/auth-type/md5-auth">
      </md5-auth>
    </auth-type>
  </vrrp-extended>
```

The following is an example of the PATCH operation to configure MD5 authentication.

### URI

http://host:80/rest/config/running/interface/Ve/100/ip/vrrp-extended/auth-type/md5-auth

### Request Body

```
<md5-auth><auth-data>vrrp-e</auth-data></md5-auth>
```

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/ access-group

Configures, modifies, or retrieves the Internet Protocol version 6 (IPv6) access group.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group	Configures IPv6 access group.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list}/{ip-direction}	Retrieves IP direction. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list}/{ip-direction}/traffic-type	Displays traffic type. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group	Displays access group configuration. Valid interface type: Management.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/mgmt-ip-direction	Retrieves Management IP direction. Valid interface type: Management.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6	<access-group><ipv6-access-list>{ipv6-l3-acl-policy-name}</ipv6-access-list><ip-direction>{enumeration}</ip-direction></access-group>	Configures IP access group. Valid interface types: Ethernet, Port-channel, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list}/{ip-direction}	<access-group><traffic-type>{enumeration}</traffic-type></access-group>	Enables switched traffic only. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group	<access-group><mgmt-ipv6-access-list>{ipv6-l3-acl-policy-name}</mgmt-ipv6-access-list><mgmt-ip-direction>{enumeration}</mgmt-ip-direction></access-group>	Configures IP Access group. Valid interface type: Management.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list}/{ip-direction}/traffic-type	<traffic-type>{enumeration}</traffic-type>	Enables switched traffic only. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group	<access-group><mgmt-ipv6-access-list>{ipv6-l3-acl-policy-name}</mgmt-ipv6-access-list><mgmt-ip-direction>{enumeration}</mgmt-ip-direction></access-group>	Configures IP Access group. Valid interface type: Management.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6access-group/{ipv6-access-list}/{ip-direction}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6access-group/{ipv6-access-list}/{ip-direction}/traffic-type
<base_URI>/config/running/interface/Management/{name}/ipv6/access-group/mgmt-ip-direction

## Parameters

*ipv6-access-list*

Specifies the name of the standard or extended IP access list.

*ip-direction*

Specifies the binding direction. Valid values are **in** (ingress direction) and **out** (egress direction).

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/5%22/ipv6/access-group

### Request Body

None

### Response Body

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list" y:self="/rest/config/running/
interface/ethernet/%221/5%22/ipv6/access-group/acl1%2Cin">
  <ipv6-access-list>acl1</ipv6-access-list>
  <ip-direction>in</ip-direction>
</access-group>
```

The following is an example of the POST operation to add an access group.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/5%22/ipv6

### Request Body

```
<access-group>
  <ipv6-access-list>acl8</ip-access-list>
  <ip-direction>in</ip-direction>
</access-group>
```

### Response Body

None

The following is an example of the DELETE operation to remove the access group configuration.

### URI

http://host:80/rest/config/running/interface/ethernet/%221/1%22/ipv6/access-group/(ipv6-access-list)/(ip-direction)

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/dhcp/relay

Configures Dynamic Host Configuration Protocol version 6 {DHCPv6} relay.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay	Configures DHCPv6 relay server. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay	Configures DHCPv6 relay server. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/address	Configures DHCPv6 server address. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{ipv6-address}	Configures DHCPv6 server address. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{ipv6-address}/use-vrf	Configures DHCPv6 server VRF to use. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{ipv6-address}/interface	Configures DHCPv6 server interface. Valid interface types: Ethernet, Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay	<servers><address>{ipv6-address}</address><use-vrf>{vrf-name}</use-vrf></servers>	Configures DHCPv6 server and VRF to use. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay	<servers><address>{ipv6-address}</address>	Configures DHCPv6 server. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay	<servers><address>{ipv6-address}</address><interface><interface>{type}</interface><interface-name>{name}</interface-name></servers>	Configures DHCPv6 server interface. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{address}/use-vrf	<use-vrf>{common-def:vrf-name}</use-vrf>	Configures VRF to use. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{address}/interface	<interface><interface>{dhcpv6-itype}</interface><interface-name>{dhcpv6-ifname}</interface-name></interface>	Configures DHCPv6 server interface. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{address}	<servers><use-vrf>{common-def:vrf-name}</use-vrf></servers>	Configures VRF to use. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{address}/interface	<interface><interface>{dhcpv6-iftyp}</interface><interface-name>{dhcpv6-ifname}</interface-name></interface>	Configures DHCPv6 server interface. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/{ipv6-address}

## Parameters

*interface-type*

Valid interface type: **Ethernet** and **Ve**.

*address*

IPv6 address of the server.

*use-vrf*

VRF name of the DHCPv6 server

*servers*

DHCPv6 Server IP Address

## Usage Guidelines

GET, PUT, PATCH, POST, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ve/11/ipv6/dhcp/relay

### Request Body

None

### Response Body

```
<relay xmlns="urn:brocade.com:mgmt:brocade-dhcpv6" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/ve/11/ipv6/dhcp/relay">
  <servers y:self="/rest/config/running/interface/ve/11/ipv6/dhcp/relay/servers/2021:dade::1010">
    <address>2021:dade::1010</address>
  </servers>
  <servers y:self="/rest/config/running/interface/ve/11/ipv6/dhcp/relay/servers/2031:dade::1010">
    <address>2031:dade::1010</address>
  </servers>
</relay>
```

The following example uses the POST option to configure DHCPv6 server.

### URI

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay

### Request Body

```
<servers>
  <address>2021:dade::1020</address>
  <use-vrf>vrf1</use-vrf>
</servers>
```

### Response Body

None

The following example uses the DELETE option to remove DHCPv6 server.

### URI

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/ipv6/dhcp/relay/servers/2021:dade::1020

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/nd

Configures, modifies, or retrieves the Neighbor Discovery (ND) commands on a specified interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd	Configures Neighbor Discovery commands on a specified interface. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/managed-config-flag	Sets managed config flag in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/other-config-flag	Sets other config flag in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-lifetime	Sets lifetime period in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/reachable-time	Sets reachable period in milliseconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/mtu	Sets IP MTU in bytes. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/retrans-timer	Sets retransmit interval time. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/hoplimit	Sets the hop limit. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference	Sets router-preference value on the interface, default is medium. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/dad/attempts	Sets attempts count for duplicate address detection. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/dad/time	Sets duplicate address detection interval. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/cache/expire	Sets cache expire timeout in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/suppress-ra-flag	Sets suppress router advertisement flag. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/mtu	Disables sending MTU in Router-Advertisement messages. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/all	Suppresses response to RS in addition to not sending RAS. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/max-interval	Sets maximum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/min	Sets minimum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/send-ra	Sets to send router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ns-interval	Sets neighbor solicitation interval in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppress	Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.



GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/broadcast-mac-trap	Enables the trap for all the ipv6 packets with broadcast MAC. Valid interface types: Ethernet, Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address	<suppressing-address><suppress-ipv6-address>(req_val)</suppress-ipv6-address><suppress /></suppressing-address>	Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/managed-config-flag	<managed-config-flag />	Sets managed config flag in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/other-config-flag	<other-config-flag>(enumeration)</other-config-flag>	Sets other config flag in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-lifetime	<ra-lifetime>(decimal)</ra-lifetime>	Sets RA lifetime period in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/reachable-time	<reachable-time>(decimal)</reachable-time>	Sets reachable period in milliseconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/mtu	<mtu>(decimal)</mtu>	Sets IP MTU in bytes. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/retrans-timer	<retrans-timer>(decimal)</retrans-timer>	Sets retransmit interval time. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/hoplimit	<hoplimit>(decimal)</hoplimit>	Sets the hop limit. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/high	<high>(enumeration)</high>	Sets router-preference value as high on the interface. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/low	<low>(enumeration)</low>	Sets router-preference value as low on the interface. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/medium	<medium>(enumeration)</medium>	Sets router-preference value as medium on the interface. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/dad/attempts	<attempts>(decimal)</attempts>	Sets attempts count for duplicate address detection. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/dad/time	<time>(decimal)</time>	Sets duplicate address detection interval. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/cache/expire	<expire>(decimal)</expire>	Sets cache expire timeout in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/suppress-ra-flag	<suppress-ra-flag></suppress-ra-flag>	Sets suppress router advertisement flag. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/mtu	<mtu></mtu>	Disables sending MTU in Router-Advertisement messages. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/all	<all></all>	Suppresses response to RS in addition to not sending RAS. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/max-interval	<max-interval>{decimal}</max-interval>	Sets maximum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/min	<min>{decimal}</min>	Sets minimum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/send-ra	<send-ra></send-ra>	Sets to send router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ns-interval	<ns-interval>{decimal}</ns-interval>	Sets neighbor solicitation interval in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppress	<suppress></suppress>	Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/broadcast-mac-trap	<broadcast-mac-trap></broadcast-mac-trap>	Enables the trap for all the ipv6 packets with broadcast MAC. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppressing-address/(suppress-ipv6-address)	<suppressing-address><suppress /></suppressing-address>	Suppresses the specified IPv6 address in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/prefix/(prefix-ipv6-address)	<prefix><no-onlink></no-onlink></prefix>	Specifies to not use prefix for onlink determination. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/prefix/(prefix-ipv6-address)	<prefix><off-link></off-link></prefix>	Prefix is offlink. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/managed-config-flag	<managed-config-flag />	Sets managed config flag in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/other-config-flag	<other-config-flag>{enumeration}</other-config-flag>	Sets other config flag in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-lifetime	<ra-lifetime>{decimal}</ra-lifetime>	Sets RA lifetime period in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/reachable-time	<reachable-time>{decimal}</reachable-time>	Sets reachable period in milliseconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/mtu	<mtu>{decimal}</mtu>	Sets IP MTU in bytes. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/retrans-timer	<retrans-timer>{decimal}</retrans-timer>	Sets retransmit interval time. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/hoplimit	<hoplimit>{decimal}</hoplimit>	Sets the hop limit. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/high	<high>{enumeration}</high>	Sets router-preference value as high on the interface. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/low	<low>{enumeration}</low>	Sets router-preference value as low on the interface. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/medium	<medium>{enumeration}</medium>	Sets router-preference value as medium on the interface. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/dad/attempts	<attempts>{decimal}</attempts>	Sets attempts count for duplicate address detection. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/dad/time	<time>{decimal}</time>	Sets duplicate address detection interval. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/cache/expire	<expire>{decimal}</expire>	Sets cache expire timeout in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/suppress-ra-flag	<suppress-ra-flag></suppress-ra-flag>	Sets suppress router advertisement flag. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/mtu	<mtu></mtu>	Disables sending MTU in Router-Advertisement messages. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/all	<all></all>	Suppresses response to RS in addition to not sending RAS. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/max-interval	<max-interval>{decimal}</max-interval>	Sets maximum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/min	<min>{decimal}</min>	Sets minimum interval in seconds between router advertisements. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/send-ra	<send-ra></send-ra>	Sets to send router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ns-interval	<ns-interval>{decimal}</ns-interval>	Sets neighbor solicitation interval in seconds. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppress	<suppress></suppress>	Suppresses all IPv6 addresses in router advertisement. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/broadcast-mac-trap	<broadcast-mac-trap></broadcast-mac-trap>	Enables the trap for all the ipv6 packets with broadcast MAC. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/prefix/{prefix-ipv6-address}/no-onlink	<prefix><no-onlink></no-onlink></prefix>	Specifies to not use prefix for onlink determination. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/prefix/{prefix-ipv6-address}/off-link	<prefix><off-link></off-link></prefix>	Prefix is offlink. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/managed-config-flag
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/other-config-flag
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-lifetime
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/reachable-time
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/mtu
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/retrans-timer
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/hoplimit
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/high
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/low
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/medium
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/router-preference/dad/attempts
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/dad/time
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/cache/expire
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/suppress-ra-flag
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/mtu
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/suppress-ra/all
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/max-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ra-interval/min
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/send-ra
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/ns-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppress
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/broadcast-mac-trap
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/address/suppressing-address/{suppress-ipv6-address}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/prefix/{prefix-ipv6-address}/no-onlink
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/prefix/{prefix-ipv6-address}/off-link

## Parameters

### *interface-type*

Valid interface types: **Ethernet** and **Ve**.

### *ra-lifetime*

Specifies the RA lifetime period in seconds. Valid values are from 0 through 9000 seconds. Default value is 1800 seconds.

### *reachable-time*

Specifies the reachable period in milliseconds. Valid values are from 0 through 3600000. The default value is 0.

*mtu*

Specifies the IP MTU in bytes. Valid values are from 1280 through 65535. The default value is 1500.

*retrans-timer*

Specifies the retransmit interval time in milliseconds. Valid values are from 0 through 4294967295. The default value is 0.

*hoplimit*

Specifies the hop limit. Valid values are from 0 through 255. The default value is 64.

*dad attempts*

Specifies the number of neighbor solicitation attempts for duplicate address detection. Valid values are from 0 through 10 attempts. Default value is 2.

*dad time*

Specifies the duplicate address detection interval in seconds. Valid values are from 1 through 5 seconds. Default value is 1 second.

*expire*

Specifies the time interval after which the cache is deleted or refreshed. Valid values are from 30 through 14400 seconds. The default value is 14400.

*max-interval*

Specifies the maximum interval in seconds between router advertisements. Valid values are from 4 through 1800 seconds. The default value is 600.

*min*

Specifies the minimum interval in seconds between router advertisements. Valid values are from 4 through 1800 seconds. The default value is 200.

*ns-interval*

Specifies the neighbor solicitation interval in seconds. Valid values are from 1 through 5 seconds. Default value is 1 second.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd

### Request Body

None

### Response Body

```
<nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd">
  <suppress-ra y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/suppress-ra">
    </suppress-ra>
  <ra-interval y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-interval">
    </ra-interval>
  <router-preference y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/router-preference">
    </router-preference>
  <ra-dns-server y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-dns-server/2100:21:2134::566">
    <dns-server-prefix>2100:21:2134::566</dns-server-prefix>
  </ra-dns-server>
  <ra-dns-server y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-dns-server/3600:36::1">
    <dns-server-prefix>3600:36::1</dns-server-prefix>
  </ra-dns-server>
  <ra-dns-server y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-dns-server/3600:36::11">
    <dns-server-prefix>3600:36::11</dns-server-prefix>
  </ra-dns-server>
  <ra-domain-name y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-domain-name/dhiya.in">
    <domain-name-string>dhiya.in</domain-name-string>
  </ra-domain-name>
  <ra-domain-name y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-domain-name/dhiya.sk">
    <domain-name-string>dhiya.sk</domain-name-string>
  </ra-domain-name>
  <ra-domain-name y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-domain-name/dhiya.uk">
    <domain-name-string>dhiya.uk</domain-name-string>
  </ra-domain-name>
  <ra-domain-name y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/ra-domain-name/dhiya.us">
    <domain-name-string>dhiya.us</domain-name-string>
  </ra-domain-name>
  <address y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/address">
    </address>
  <dad y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/dad">
    </dad>
  <cache y:self="/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/cache">
    </cache>
</nd>
```

The following is an example of the PUT operation to configure managed config flag on a specified interface.

### *URI*

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/ipv6/nd/managed-config-flag

### *Request Body*

```
<managed-config-flag>true</managed-config-flag>
```

### *Response Body*

None

The following is an example of the DELETE operation to remove managed config flag on a specified interface.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ipv6/nd/managed-config-flag

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/ospf

Configures, modifies, or retrieves the Open Shortest Path First (OSPF) version 3.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/active	Configures PBR (IPv6). Valid interface types: Ethernet, Ve, Loopback.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/area	Displays the OSPF router area id. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/active	Sets a specific OSPFv3 interface to active. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/passive	Sets a specific OSPFv3 interface to passive. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/bfd	Displays BFD operation mode on this interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/bfd/bfd-enable	Displays whether BFD is enabled on this interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/cost	Displays cost for a specific OSPFv3 interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/instance	Displays the number of OSPFv3 instances running on an interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/mtu-ignore	Displays whether maximum transmission unit (MTU) match checking is enabled or disabled. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/network	Displays network type. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/priority	Displays priority for designated router (DR) election and backup designated routers (BDRs) on the interface you are connected to. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/suppress-linklsa	Displays whether link LSA advertisements are suppressed. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	Displays IPSEC authentication for the interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec/key-add-remove-interval	Displays key add or remove interval in seconds. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/hello-interval	Sets the length of time between the transmission of hello packets that an interface sends to neighbor routers. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/dead-interval	Displays the time period for which a neighbor router waits for a hello packet from the device before declaring the router down. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/hello-jitter	Displays the allowed jitter between HELLO packets. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/retransmit-interval	Displays the retransmit interval. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/transmit-delay	Displays transmit delay for link-update packets. Valid interface types: Ethernet, Ve, Loopback.



PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/active	<active>{enumeration}</active>	Sets a specific OSPFv3 interface to active. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/passive	<passive>{enumeration}</passive>	Sets a specific OSPFv3 interface to passive. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/cost	<cost>{uint32}</cost>	Configures cost for a specific OSPFv3 interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/instance	<instance>{uint32}</instance>	Specifies the number of OSPFv3 instances running on an interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/mtu-ignore	<mtu-ignore>{enumeration}</mtu-ignore>	Enables or disables maximum transmission unit (MTU) match checking. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/network	<network>{enumeration}</network>	Configures network type. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/priority	<priority>{uint32}</priority>	Configures priority for designated router (DR) election and backup designated routers (BDRs) on the interface you are connected to. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/suppress-linklsa	<suppress-linklsa>{enumeration}</suppress-linklsa>	Suppresses link LSA advertisements. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec/key-add-remove-interval	<key-add-remove-interval>{common-def:time-interval-sec}</key-add-remove-interval>	Key add or remove interval in seconds. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/hello-interval	<hello-interval>{common-def:time-interval-sec}</hello-interval>	Sets the length of time between the transmission of hello packets that an interface sends to neighbor routers. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/dead-interval	<dead-interval>{common-def:time-interval-sec}</dead-interval>	Specifies the time period for which a neighbor router waits for a hello packet from the device before declaring the router down. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/hello-jitter	<hello-jitter>{uint32}</hello-jitter>	Sets the allowed jitter between HELLO packets. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/retransmit-interval	<retransmit-interval>{common-def:time-interval-sec}</retransmit-interval>	Configures the retransmit interval. The retransmit interval is the time between Link-State Advertisement (LSA) retransmissions to adjacent routers for a given interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/transmit-delay	<transmit-delay>{common-def:time-interval-sec}</transmit-delay>	Configures transmit delay for link-update packets. The transmit delay is the estimated time required for OSPFv3 to send linkstate update packets on the interface to which you are connected. Valid interface types: Ethernet, Ve, Loopback.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><ah>{algorithm-type-ah}</ah><disable>{enumeration}</disable></authentication>	Security Parameter Index specifying the authentication algorithm to use. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt><disable>{enumeration}</disable></authentication>	Security Parameter Index without encrypting the key. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key><disable>{enumeration}</disable></authentication>	Security Parameter Index with Key used for ah. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><esp>{algorithm-type-esp}</esp><disable>{enumeration}</disable></authentication>	Security Parameter Index specifying Encapsulating Security Payload (ESP). Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><esp-no-encrypt>{enumeration}</esp-no-encrypt><disable>{enumeration}</disable></authentication>	Security Parameter Index without encrypting the key. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key><disable>{enumeration}</disable></authentication>	Security Parameter Index with Hexadecimal key string for ESP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><esp-auth>{algorithm-type-ah}</esp-auth><disable>{enumeration}</disable></authentication>	Security Parameter Index using Authentication Algorithm. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt><disable>{enumeration}</disable></authentication>	Security Parameter Index without encrypting the key. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key><disable>{enumeration}</disable></authentication>	Security Parameter Index with Hexadecimal key string for authentication algorithm. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec	<ipsec><key-add-remove-interval>{common-def:time-interval-sec}</key-add-remove-interval></ipsec>	Key add or remove interval in seconds. Valid interface types: Ethernet, Ve, Loopback.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/area
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/active
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/passive
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/bfd
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/bfd/bfd-enable
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/cost
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/instance
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/mtu-ignore
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/network
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/priority

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/suppress-linklsa
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/authentication/ipsec/key-add-remove-interval
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/hello-interval
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/dead-interval
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/hello-jitter
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/retransmit-interval
<base_URI>/config/running/interface/{interface-type}/{name}/ipv6/ospf/transmit-delay

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf

### Request Body

None

### Response Body

```
<ospf xmlns="urn:brocade.com:mgmt:brocade-ospfv3" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf">
  <area>10</area>
  <bfd y:self="/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf/bfd">
  </bfd>
  <authentication y:self="/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf/authentication">
    <ipsec y:self="/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf/authentication/ipsec">
    </ipsec>
  </authentication>
</ospf>
```

interface/{interface-type}/{interface-name}/ipv6/ospf

The following example uses the PATCH option to configure OSPF.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf

### *Request Body*

```
<ospf><area>10</area></ospf>
```

### *Response Body*

None

The following example uses the DELETE option to remove the OSPF configuration.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/ospf/bfd

Configures, modifies, or retrieves Bidirectional Forwarding Detection (BFD) information for an IPv6 interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd	Configures, modifies, or retrieves BFD information for an interface. Valid interface types: Ethernet, Ve, Loopback.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd	Retrieves BFD operation mode details. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd/intf-bfd-enable	Returns "true" if BFD operation mode is enabled on this interface. Valid interface types: Ethernet, Ve, Loopback.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd	<bfd><bfd-enable>{enumeration}</bfd-enable></bfd>	Enables BFD operation mode on this interface. Valid interface types: Ethernet, Ve, Loopback.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd/bfd-enable	<bfd-enable>{enumeration}</bfd-enable>	Enables BFD operation mode on this interface. Valid interface types: Ethernet, Ve, Loopback.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/bfd/bfd-enable

## Parameters

*interface-type*

Allowed values are Ethernet, Loopback, and Ve.

*bfd-enable*

Enables BFD: Boolean variable.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/ipv6/ospf/bfd

### Request Body

None

### Response Body

```
<bfd xmlns="urn:brocade.com:mgmt:brocade-ospfv3" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/10%22/ipv6/ospf/bfd">
  <bfd-enable>true</bfd-enable>
</bfd>
```

The following example uses the PATCH option to enable BFD.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/ipv6/ospf/

### Request Body

```
<ospf><bfd><bfd-enable>true</bfd-enable></bfd></ospf>
```

### Response Body

None

The following example uses the DELETE option to remove the BFD configuration.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/ipv6/ospf/bfd

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/policy

Configures, modifies, or retrieves the Policy-based Routing (PBR) configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/policy	Configures PBR (IPv6). Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/policy	Retrieves PBR (IPv6) policy. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/policy/route-map	Retrieves PBR (IPv6) route map. Valid interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/policy/route-map/ipv6-route-map-name	Retrieves PBR (IPv6) route map name. Valid interface types: Ethernet, Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/Ethernet/{name}/ipv6/policy/route-map	<route-map><ipv6-route-map-name>{common-def:name-string63}</ipv6-route-map-name></route-map>	Configures PBR (IPv6). Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/Ethernet/{name}/ipv6/policy/route-map/ipv6-route-map-name	<ipv6-route-map-name>{common-def:name-string63}</ipv6-route-map-name>	Configures PBR (IPv6). Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/Ethernet/{name}/ipv6/policy/route-map/ipv6-route-map-name

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ipv6/policy

### *Request Body*

None

### *Response Body*

None

The following is an example of the PUT operation to configure a route map.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ipv6/policy/route-map/map10

### *Request Body*

```
<policy xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%221/39%22/ipv6/policy">
  <route-map y:self="/rest/config/running/interface/Ethernet/%221/39%22/ipv6/policy/route-map">
    <ipv6-route-map-name>map10</ipv6-route-map-name>
  </route-map>
</policy>
```

### *Response Body*

None

The following is an example of the DELETE operation to remove a route map.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ipv6/policy/route-map/map10

### *Request Body*

None

### *Response Body*

None

interface/{interface-type}/{interface-name}/ipv6/policy

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ipv6/vrrp-extended

Configures, retrieves, and modifies Virtual Router Redundancy Protocol Extended (VRRP-E).

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended	Configures VRRP-E. Valid interface type: Ve.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended	Displays ipv6 configuration. Valid interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type	Displays authentication type. Valid interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type/md5-auth	Displays md5 authentication. Valid interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type/md5-auth/auth-data	Displays authentication data. Valid interface type: Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/Ve/{name}/ipv6/vrrp-extended/auth-type/md5-auth/auth-data	<auth-data>{string}</auth-data>	Configures authentication data. Valid interface type: Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type/md5-auth	<md5-auth><auth-data>{string}</auth-data></md5-auth>	Configures MD5 authentication. Valid interface type: Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type/md5-auth
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended/auth-type/md5-auth/auth-data

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ve/2/ipv6/vrrp-extended

### Request Body

None

### Response Body

```
<vrrp-extended xmlns="urn:brocade.com:mgmt:brocade-vrrp" y:self="/rest/config/running/interface/Ve/2/ipv6/vrrp-extended">
  <auth-type y:self="/rest/config/running/interface/Ve/2/ipv6/vrrp-extended/auth-type">
    <md5-auth y:self="/rest/config/running/interface/Ve/2/ipv6/vrrp-extended/auth-type/md5-auth">
      </md5-auth>
    </auth-type>
  </vrrp-extended>
```

The following is an example of the PATCH operation to configure MD5 authentication.

### URI

http://host:80/rest/config/running/interface/Ve/100/ipv6/vrrp-extended/auth-type/md5-auth

### Request Body

```
<md5-auth><auth-data>vrrpe</auth-data></md5-auth>
```

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/link-error-disable

Configures port link dampening {PLD}.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-error-disable	Configures port link dampening {PLD}. Valid interface type: Ethernet.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-error-disable	Configures port link dampening {PLD}. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-error-disable/wait-time-in-sec	Configures port link dampening {PLD} wait time. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-error-disable	<link-error-disable><link-error-disable-entry>1</link-error-disable-entry><sampling-time-in-sec>{unit32}</sampling-time-in-sec><wait-time-in-sec>{unit32}</wait-time-in-sec></link-error-disable>	Edits port link dampening configuration. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-error-disable	<link-error-disable><link-error-disable-entry>1</link-error-disable-entry><sampling-time-in-sec>{unit32}</sampling-time-in-sec><wait-time-in-sec>{unit32}</wait-time-in-sec></link-error-disable>	Updates port link dampening configuration. Valid interface type: Ethernet.

## Parameters

*interface-type*

Valid interface type: **Ethernet** only.

*link-error-disable-entry*

Specifies the link error disable entry.

*sampling-time-in-sec*

Specifies the sampling time.

*wait-time-in-sec*

Specifies the wait time.

## Usage Guidelines

GET, PUT, PATCH, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/link-error-disable

### Request Body

None

### Response Body

```
<link-error-disable xmlns="urn:brocade.com:mgmt:brocade-pld" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%220/10%22/link-error-disable">
  <link-error-disable-entry>10</link-error-disable-entry>
  <sampling-time-in-sec>100</sampling-time-in-sec>
  <wait-time-in-sec>200</wait-time-in-sec>
</link-error-disable>
```

The following example uses the PATCH option to update the configuration.

### URI

http://host:80/rest/config/running/interface/ethernet/%220/10%22/link-error-disable

### Request Body

```
<link-error-disable><link-error-disable-entry>10</link-error-disable-entry><sampling-time-in-sec>100</
sampling-time-in-sec><wait-time-in-sec>200</wait-time-in-sec></link-error-disable>
```

### Response Body

None

The following example uses the DELETE option to remove the link-error-disable configuration.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%220/10%22/link-error-disable

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/link-fault-signaling

Configures, retrieves, and modifies Link Fault Signaling {LFS}.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling	Configures LFS. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling	Retrieves LFS. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/tx	Retrieves TX LFS. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/rx	Retrieves RX LFS. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/rx	<rx>{enumeration}</rx>	Configures RX LFS. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/tx	<tx>{enumeration}</tx>	Configures TX LFS. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/rx	<rx>{enumeration}</rx>	Configures RX LFS. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/tx	<tx>{enumeration}</tx>	Configures TX LFS. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/tx
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-fault-signaling/rx

## Parameters

*interface-type*

Valid interface type: **Ethernet** only.

*rx*

Specifies RX LFS



tx

Specifies TX LFS

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%226/57%22/link-fault-signaling

### Request Body

None

### Response Body

```
<link-fault-signaling xmlns="urn:brocade.com:mgmt:brocade-lfs" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%226/57%22/link-fault-signaling">
  <rx>on</rx>
  <tx>on</tx>
</link-fault-signaling>
```

The following example uses the PATCH option to configure RX LFS.

### URI

http://host:80/rest/config/running/interface/Ethernet/%226/57%22/link-fault-signaling/rx

### Request Body

```
<rx>on</rx>
```

### Response Body

None

interface/{interface-type}/{interface-name}/link-fault-signaling

The following example uses the DELETE option to remove TX LFS.

### *URI*

http://host:80/rest/config/running/interface/Ethernet//%226/57%22//link-fault-signaling/tx

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/lldp

Configures Link Layer Discovery Protocol [LLDP] at the interface level.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp	Configures LLDP at the interface level. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp/disable	Retrieves LLDP information. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp/profile	Retrieves LLDP profile information. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp	<lldp><disable>{string}</disable></lldp>	Enables or disables LLDP. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp	<lldp><profile>{string}</profile></lldp>	Configures LLDP profile. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp	<disable>{string}</disable>	Enables or disables LLDP. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp	<profile>{string}</profile>	Configures LLDP profile. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/lldp/profile

## Parameters

*interface-type*

Valid interface type: **Ethernet** only.

*profile*

Specifies the LLDP profile.

## Usage Guidelines

GET, PATCH, PUT, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%222/7%22/lldp/profile

### *Request Body*

None

### *Response Body*

```
<profile>profile1</profile>
```

The following example uses the PATCH option to configure LLDP profile.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%222/7%22/lldp/profile

### *Request Body*

```
<profile>profile1</profile>
```

### *Response Body*

None

The following example uses the DELETE option to remove LLDP profile.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%222/7%22/lldp/profile

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/ protocol/ptp

Configures Precision Time Protocol (PTP).

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp	Configures PTP. Valid interface types: Ethernet and Port-channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp	Retrieves PTP configuration. Valid interface types: Ethernet and Port-channel.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol	<ptp><sync-interval>{int32}</sync-interval><delay-request-min-interval>{int32}</delay-request-min-interval><ptp-vlan>{vlan-type}</ptp-vlan><enable>{enumerate}</enable></ptp>	Configures PTP globally on an interface. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp	<enable>true</enable>	Enables PTP on an interface. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp	<ptp-vlan>{vlan-type}</ptp-vlan>	Configures the VLAN used to transmit Precision Time Protocol (PTP) frames. Valid interface types: Ethernet and Port-channel.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/sync-interval	<sync-interval>{int32}</sync-interval>	Configures Interval between PTP synchronization messages. Range: -4 - +2. Default value is -1 (i.e. 2pkts/second). Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/delay-request-min-interval	<delay-request-min-interval>{int32}</delay-request-min-interval>	Configures minimal interval allowed between PTP Delay-Request messages. The valid range is from -4 to 2 log seconds. Default value is -1 (i.e. 2 pkts/second). Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/announce-interval	<announce-interval>{uint32}</announce-interval>	Configure the interval between PTP announce messages on edge interface. The range for PTP announcement interval is from 0 to 4 log seconds. Default interval value is 0 (i.e. one sec). Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/announce-timeout	<announce-timeout>{uint32}</announce-timeout>	Configure the number of announce intervals elapsed before timeout occurs on an interface. The valid timeout count is from 3 to 10. Default value is 3. Valid interface types: Ethernet and Port-channel.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/enable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/ptp-vlan
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/sync-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/delay-request-min-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/announce-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/protocol/ptp/announce-timeout

## Parameters

### *interface-type*

Valid interface types: Ethernet and Port-channel.

### *ptp-vlan*

VLAN used to transmit Precision Time Protocol (PTP) frames. Default is the access vlan on the access port, native vlan on the trunk port.

### *enable*

Represents whether PTP is enabled. (Boolean)

### *sync-interval*

Interval between PTP synchronization messages. Range: -4 - 2. Default value is -1 (i.e. 2pkts/second)

### *delay-request-min-interval*

Minimum interval allowed between PTP Delay-Request messages. Range: -4 to 2 log seconds. Default is -1 (i.e. 2 packets/second).

### *announce-interval*

Interval between PTP announce messages on edge interface. Range: 0 to 4 log seconds. Default interval value is 0 (i.e. one second).

### *announce-timeout*

The number of announce intervals elapsed before timeout occurs on an interface. Range: 3 to 10. Default is 3.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/31:1%22/protocol/ptp

### Request Body

None

### Response Body

```
<ptp xmlns="urn:brocade.com:mgmt:brocade-ptp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/31:1%22/protocol/ptp">
  <enable>true</enable>
  <sync-interval>-2</sync-interval>
  <delay-request-min-interval>-2</delay-request-min-interval>
  <ptp-vlan>4089</ptp-vlan>
</ptp>
```

The following is an example of the POST operation to create a PTP configuration.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/31:1%22/protocol

### Request Body

```
<ptp><sync-interval>-2</sync-interval><delay-request-min-interval>-2</delay-request-min-interval><ptp-vlan>4089</ptp-vlan><enable>true</enable></ptp>
```

### Response Body

None

The following is an example of the DELETE operation to remove a PTP configuration.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/31:1%22/protocol/ptp

### Request Body

None

### Response Body

None

interface/{interface-type}/{interface-name}/protocol/ptp

## History

Release version	History
17s.1.00	This API call was introduced.



# interface/{interface-type}/{interface-name}/qos

Configures, modifies and retrieves QoS on an interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	Configures, modifies and retrieves QoS on an interface.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	Quality of Service (QoS). Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-cos	Apply DSCP-to-Traffic-Class map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-mutation	Apply DSCP-Mutation map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-traffic-class	Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos	Configure Default CoS. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/traffic-class	Configure Default Traffic Class (TC). Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust	Configure QoS Trust. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust/cos	Trust L2 CoS field in incoming packets for deriving internal Traffic Class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust/dscp	Trust L3 DSCP field in incoming packets for deriving internal Traffic Class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-mutation	Apply CoS-Mutation map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/traffic-class-cos	Apply Traffic-Class-to-CoS map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-traffic-class	Apply CoS-to-Traffic-Class map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect	Configure Random Early Detect (RED) Profile. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect/traffic-class/{red-tc-value}	Traffic-class to configure RED on. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor	Configure QoS drop monitor polling. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor/enable	Enable polling on ingress and egress queue drops on this interface. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol	Configure IEEE 802.3x Flow Control. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol/rx	Configure Pause reception. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue	Configure Ingress Queue Parameters. Supported interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/unicast	Configure Unicast Packet Handling Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/unicast/queue-size/{traffic-class}	Configure unicast queue size. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast	Configure Multicast Packet Handling. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/guarantee-rate	Configure multicast data guarantee rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/best-effort-rate	Configure multicast data best effort rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/queue-size/{traffic-class}	Configure multicast queue size. Supported interface type: Ethernet.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect	<traffic-class><red-tc-value>{traffic-class-id-type}</red-tc-value><red-profile-id>{uint32}</red-profile-id></traffic-class>	Configure RED on a traffic class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface{interface-type}/{interface-name}/qos/rx-queue/unicast	<queue-size><traffic-class>{traffic-class-id-type}</traffic-class><min-queue-size>{min-queue-size-type}</min-queue-size><max-queue-size>{max-queue-size-type}</max-queue-size></queue-size>	Configure unicast queue size. Supported interface type: Ethernet.
<base_URI>/config/running/interface{interface-type}/{interface-name}/qos/rx-queue/multicast	<queue-size><traffic-class>{traffic-class-id-type}</traffic-class><min-queue-size>{min-queue-size-type}</min-queue-size><max-queue-size>{max-queue-size-type}</max-queue-size></queue-size>	Configure multicast queue size. Supported interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-cos	<dscp-cos>{map-name-type}</dscp-cos>	Configure Default CoS. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-mutation	<dscp-mutation>{map-name-type}</dscp-mutation>	Apply DSCP-Mutation map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-traffic-class	<dscp-traffic-class>{map-name-type}</dscp-traffic-class>	Apply DSCP-to-Traffic-Class map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos	<cos>{cos-id-type}</cos>	Configure Default CoS Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/traffic-class	<traffic-class>{traffic-class-id-type}</traffic-class>	Configure Default Traffic Class (TC). Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust/cos	<cos>true</cos>	Trust L2 CoS field in incoming packets for deriving internal Traffic Class Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust/dscp	<dscp>true</dscp>	Trust L3 DSCP field in incoming packets for deriving internal Traffic Class Supported interface type: Ethernet, Port-channel.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-mutation	<cos-mutation>{map-name-type}</cos-mutation>	Apply CoS-Mutation map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/traffic-class-cos	<traffic-class-cos>{map-name-type}</traffic-class-cos>	Apply Traffic-Class-to-CoS map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-traffic-class	<cos-traffic-class>{map-name-type}</cos-traffic-class>	Apply CoS-to-Traffic-Class map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor/enable	<enable>>true</enable>	Enable polling on ingress and egress queue drops on this interface. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol	<flowcontrol><tx>{enumeration}</tx><rx>{enumeration}</rx></flowcontrol>	Configure IEEE 802.3x Flow Control. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/guarantee-rate	<guarantee-rate>{guarantee-rate-type}</guarantee-rate>	Configure multicast data guarantee rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/best-effort-rate	<best-effort-rate>{best-effort-rate-type}</best-effort-rate>	Configure multicast data best effort rate. Supported interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><dscp-cos>{map-name-type}</dscp-cos></qos>	Apply DSCP-to-CoS map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><dscp-traffic-class>{map-name-type}</dscp-traffic-class></qos>	Apply DSCP-to-Traffic-Class map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><dscp-mutation>{map-name-type}</dscp-mutation></qos>	Apply DSCP-Mutation map. Supported interface type: Ethernet, Port-channel, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><cos>{cos-id-type}</cos></qos>	Configure Default CoS. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><traffic-class>{traffic-class-id-type}</traffic-class></qos>	Configure Default Traffic Class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust	<trust><cos>true</cos></trust>	Trust L2 CoS field in incoming packets for deriving internal Traffic Class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust	<trust><dscp>true</dscp></trust>	Trust L3 DSCP field in incoming packets for deriving internal Traffic Class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><cos-mutation>{map-name-type}</cos-mutation></qos>	Apply CoS-Mutation mapSupported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><traffic-class-cos>{map-name-type}</traffic-class-cos></qos>	Apply Traffic-Class-to-CoS mapSupported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos	<qos><cos-traffic-class>{map-name-type}</cos-traffic-class></qos>	Apply CoS-to-Traffic-Class map. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect/traffic-class/{red-tc-value}	<traffic-class><red-profile-id>{uint32}</red-profile-id></traffic-class>	Configure RED on a traffic class. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor	<drop-monitor><enable>true</enable></drop-monitor>	Enable drop monitor polling on ingress and egress queue drops on this interface.

PATCH URIs	Payload	Description
		Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol	<flowcontrol><tx>{enumeration}</tx></flowcontrol>	Configure IEEE 802.3x Flow Control. Supported interface type: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/unicast/queue-size/{traffic-class}	<queue-size><min-queue-size>{min-queue-size-type}</min-queue-size><max-queue-size>{max-queue-size-type}</max-queue-size></queue-size>	Configure unicast queue size. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast	<multicast><guarantee-rate>{guarantee-rate-type}</guarantee-rate></multicast>	Configure multicast data guarantee rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast	<multicast><best-effort-rate>{best-effort-rate-type}</best-effort-rate></multicast>	Configure multicast data best effort rate. Supported interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/queue-size/{traffic-class}	<queue-size><min-queue-size>{min-queue-size-type}</min-queue-size><max-queue-size>{max-queue-size-type}</max-queue-size></queue-size>	Configure multicast data best effort rate. Supported interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-cos
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-mutation
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/dscp-traffic-class
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/traffic-class
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust/cos
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/trust/dscp
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-mutation
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/traffic-class-cos
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/cos-traffic-class
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/random-detect/traffic-class/{red-tc-value}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/drop-monitor/enable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/flowcontrol
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/unicast/queue-size/{traffic-class}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/guarantee-rate
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/best-effort-rate
<base_URI>/config/running/interface/{interface-type}/{interface-name}/qos/rx-queue/multicast/queue-size/{traffic-class}

## Parameters

## Usage Guidelines

GET, POST, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the QoS configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/qos

### Request Body

None

### Response Body

```
<qos xmlns="urn:brocade.com:mgmt:brocade-qos-mls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%220/10%22/qos">
  <trust y:self="/rest/config/running/interface/Ethernet/%220/10%22/qos/trust">
    <cos>false</cos>
    <dscp>false</dscp>
  </trust>
  <random-detect y:self="/rest/config/running/interface/Ethernet/%220/10%22/qos/random-detect">
  </random-detect>
  <drop-monitor y:self="/rest/config/running/interface/Ethernet/%220/10%22/qos/drop-monitor">
    <enable>false</enable>
  </drop-monitor>
  <flowcontrol y:self="/rest/config/running/interface/Ethernet/%220/10%22/qos/flowcontrol">
  </flowcontrol>
</qos>
```

The following example uses the PATCH option to configure QoS.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/qos

### Request Body

```
<qos><cos>0</cos></qos>
```

### Response Body

None

interface/{interface-type}/{interface-name}/qos

The following example uses the DELETE option to remove the QOS configuration.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%220/10%22/qos

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/rmon/collection

Configures Remote Network Monitoring [RMON] Ethernet statistics collection.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection	Configures RMON Ethernet collection statistics. Valid interface type: Ethernet.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}/owner	Displays RMON ether statistics collection owner identity. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/buckets	Displays the number of buckets for the RMON collection history. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/interval	Displays the polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/owner	Displays RMON history index owner identity. Valid interface type: Ethernet.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection	<stats><ether-stats-index>{int32}</ether-stats-index></stats>	Configures RMON collection statistics. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection	<history><history-control-index>{int32}</history-control-index></history>	Configures RMON collection history. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}/owner	<owner>{string}</owner>	Configures RMON ether statistics collection owner identity. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/buckets	<buckets>{unit32}</buckets>	Configures the number of buckets for the RMON collection history. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/interval	<interval>{unit32}</interval>	Configures polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/owner	<owner>{string}</owner>	Configures RMON history index owner identity. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}	<stats><owner>{owner-string}</owner></stats>	Configures RMON ether statistics collection owner identity. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}	<history><buckets>{history-control-buckets-requested-type}</buckets></history>	Configures the bucket type for the RMON collection history. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}	<history><interval>{history-control-interval-type}</interval></history>	Configures history control interval type. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}	<history><owner>{owner-string}</owner></history>	Configures RMON history index owner identity. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}/owner
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/buckets
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/history/{history-control-index}/owner

## Parameters

### *interface-type*

Valid interface type: **Ethernet** only.

### *ether-stats-index*

Specifies Ethernet statistics index. Valid range is from 1 to 65535.

### *history-control-index*

Specifies history control index. Valid range is from 1 to 65535.

### *owner*

Specifies the owner.

### *bucket*

Specifies the history control buckets. Valid range is from 1 to 65535. The default value is 50.

### *interval*

Specifies the history control interval. Valid range is from 1 to 3600. The default value is 1800.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/rmon/interface/Ethernet/%222/13%22/rmon/collection/stats/65535/owner

### Request Body

None

### Response Body

```
<owner xmlns="urn:brocade.com:mgmt:brocade-rmon" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%222/13%22/rmon/collection/stats/65535/owner">sk</owner>
```

The following example uses the POST option to configure RMON collection history.

### URI

http://host:80/rest/config/running/rmon/interface/Ethernet/%222/13%22/rmon/collection

### Request Body

```
<history><history-control-index>40</history-control-index></history>
```

### Response Body

None

The following example uses the DELETE option to remove owner identity.

### URI

http://host:80/rest/config/running/rmon/interface/Ethernet/%222/13%22/rmon/collection/stats/{ether-stats-index}/owner

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/sflow

Configures, modifies, or retrieves sFlow configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	Configures sFlow. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	Configures sFlow. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/enable	Retrieves information on whether sFlow is enabled on an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/polling-interval	Retrieves information on sFlow polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/sample-rate	Retrieves information on sFlow sampling rate. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><enable>true</enable></sflow>	Enables sFlow. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><polling-interval>{uint32}</polling-interval></sflow>	Configures sFlow polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><sample-rate>{uint32}</sample-rate></sflow>	Configures sFlow sampling rate. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><enable>true</enable></sflow>	Enables sFlow. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><polling-interval>{uint32}</polling-interval></sflow>	Configures sFlow polling interval. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow	<sflow><sample-rate>{uint32}</sample-rate></sflow>	Configures sFlow sampling rate. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/polling-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/sflow/sample-rate

## Parameters

*interface-type*

Valid interface type:**Ethernet** only.

*polling-interval*

Specifies polling interval value. The value can range from 1 through 65535. The default value is 20.

*sample-rate*

Specifies sampling rate value. The value can range from 2 through 1044480. The default value is 2048.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported. .

## Examples

The following example uses the GET option to retrieve the configuration details.

*URI*

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/sflow/polling-interval

*Request Body*

None

*Response Body*

```
<polling-interval xmlns=""urn:brocade.com:mgmt:brocade-sflow"" xmlns:y=""http://brocade.com/ns/rest""
y:self=""/rest/config/running/interface/Ethernet/%221/42%22/sflow/polling-interval"">56</polling-
interval>
```

The following example uses the PATCH option to configure the sampling rate.

*URI*

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/sflow/sampling-rate

*Request Body*

None

*Response Body*

```
<sample-rate>30</sample-rate>
```

interface/{interface-type}/{interface-name}/sflow

The following example uses the DELETE option to remove polling interval.

### *URI*

http://host:80/rest/config/running/interface/{interface-type}/{interface-name}/sflow/polling-interval

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/spanning-tree

Configures spanning tree.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	Configures spanning tree at the interface level. Valid interface types: Ethernet, Port-channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast	Enable an interface to move directly to forwarding on link up. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard	Change an interface's spanning tree guard mode. Supported in Ethernet and Port channel interfaces.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	<instance><id>(unit32)</id><priority>(unit32)</priority></instance>	Configures STP instance. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/autoedge	<autoedge>(empty)</autoedge>	Configures STP auto-edge. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/cost	<cost>(unit32)</cost>	Configures the cost. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/edgeportbasic	<edgeportbasic>(empty)</edgeportbasic>	Configures STP edge port. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/bpdu-guard	<bpdu-guard>(empty)</bpdu-guard>	Configures BPDU guard. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/bpdu-filter	<bpdu-filter>(empty)</bpdu-filter>	Configures BPDU filter. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/cost	<cost>(unit32)</cost>	Configures cost. Valid interface types: Ethernet, Port-channel. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/restricted-role	<restricted-role>(empty)</restricted-role>	Configures restricted role for a particular instance. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/restricted-tcn	<restricted-tcn>(empty)</restricted-tcn>	Configures restricted TCN for a particular instance. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/restricted-role	<restricted-role>(empty)</restricted-role>	Configures restricted role. Valid interface types: Ethernet, Port-channel.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/restricted-tcn	<restricted-tcn>(empty)</restricted-tcn>	Configures restricted TCN. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast	<portfastbasic></portfastbasic>	Enables an interface to move directly to forwarding on link up. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast	<bpdu-guard>(empty)</bpdu-guard>	Guards the port against reception of BPDUs. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast	<bpdu-filter>(empty)</bpdu-filter>	Sets the portfast bpdu-filter for the port. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	<link-type>(enumeration)</link-type>	Point-to-point - enable rapid transition. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	<priority>(unit32)</priority>	Sets the priority. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree	<shutdown>(empty)</shutdown>	Turns off STP. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard	<root>(empty)</root>	Disables reception of superior BPDUs. Valid interface types: Ethernet, Port-channel.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/cost	<cost>(unit32)</cost>	Configures the cost. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast/portfastbasic	<portfastbasic>(string)</portfastbasic>	Enables an interface to move directly to forwarding on link up. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast/bpdu-guard	<bpdu-guard>(empty)</bpdu-guard>	Guards the port against reception of BPDUs. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast/bpdu-filter	<bpdu-filter>(empty)</bpdu-filter>	Sets the portfast bpdu-filter for the port. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/link-type	<link-type>(enumeration)</link-type>	Point-to-point - enable rapid transition. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/priority	<priority>(unit32)</priority>	Sets the priority. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/shutdown	<shutdown>(empty)</shutdown>	Turns off STP. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard/root	<root>(empty)</root>	Disables reception of superior BPDUs. Valid interface types: Ethernet, Port-channel.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/cost	<cost>(unit32)</cost>	Configures the cost. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast/portfastbasic	<portfastbasic>(string)</portfastbasic>	Enables an interface to move directly to forwarding on link up. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast/bpdu-guard	<bpdu-guard>(empty)</bpdu-guard>	Guards the port against reception of BPDUs. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast/bpdu-filter	<bpdu-filter>(empty)</bpdu-filter>	Sets the portfast bpdu-filter for the port. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/link-type	<link-type>(enumeration)</link-type>	Point-to-point - enable rapid transition. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/priority	<priority>(unit32)</priority>	Sets the priority. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/shutdown	<shutdown>(empty)</shutdown>	Turns off STP. Valid interface types: Ethernet, Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard/root	<root>(empty)</root>	Disables reception of superior BPDUs. Valid interface types: Ethernet, Port-channel.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/portfast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/guard
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/autoedge
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/cost
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/edgeportbasic
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/bpdu-guard
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/edgeport/bpdu-filter
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/cost
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/restricted-role
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/instance/{instance-id}/restricted-tcn
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/restricted-role
<base_URI>/config/running/interface/{interface-type}/{interface-name}/spanning-tree/restricted-tcn

## Parameters

*interface-type*

Valid interface types: Ethernet, Port-channel.

*priority*

Specifies the priority.

*cost*

Path cost (lower path cost indicates greater likelihood of becoming root port). The range is from 1 to 200000000.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/ethernet/%222/13%22/spanning-tree

### Request Body

None

### Response Body

```
<spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/interface/Ethernet/%222/13%22/spanning-tree">
  <cost>100</cost>
  <portfast y:self="/rest/config/running/interface/Ethernet/%222/13%22/spanning-tree/portfast">
    <portfastbasic>true</portfastbasic>
    <bpdu-guard>true</bpdu-guard>
    <bpdu-filter>true</bpdu-filter>
  </portfast>
  <guard y:self="/rest/config/running/interface/Ethernet/%222/13%22/spanning-tree/guard">
    </guard>
    <priority>32</priority>
</spanning-tree>
```

The following example uses the POST option to configure STP BPDU guard.

### URI

http://host:80/rest/config/running/interface/ethernet/%222/13%22/spanning-tree/portfast

### Request Body

```
<bpdu-guard> (empty) </bpdu-guard>
```

### Response Body

None



The following example uses the DELETE option to remove STP.

### *URI*

http://host:80/rest/config/running/interface/ethernet/%222/13%22/spanning-tree

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/storm-control/ingress

Configures, modifies, or retrieves the broadcast, unknown-unicast, and multicast (BUM) Storm Control that limits ingress traffic on a specified interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control	Configures BUM Storm Control that limits ingress traffic on a specified interface. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress	Retrieves BUM Storm Control configuration that limits ingress traffic on a specified interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	Retrieves BUM Storm Control configuration of specific protocol type (broadcast, multicast, unknown-unicast). Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/{rate-bps   rate-percent}	Retrieves the amount of traffic allowed, either in bits per second or a percentage of the capacity of the interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/bum-action	Retrieves the bum action. Valid interface type: Ethernet.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control	<ingress><protocol-type>broadcast</protocol-type><rate-format>{enumeration}</rate-format><rate-bps>{rate-limit-bps-type}</rate-bps></ingress>	Configures BUM Storm Control that limits ingress traffic on a specified interface. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/rate-percent	<rate-percent>{rate-limit-percentage-type}</rate-percent>	Configure the rate limit in percentage of the line rate. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}/bum-action	<bum-action>{enumeration}</bum-action>	Configures bum action. Allowed values: monitor or shutdown. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	<ingress><rate-format>{enumeration}</rate-format><rate-bps>{rate-limit-bps-type}</rate-bps></ingress>	Configure the rate limit in bits per second (bps) Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	<ingress><rate-percent>{rate-limit-percentage-type}</rate-percent></ingress>	Configure the rate limit in percentage of the line rate Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}	<ingress><bum-action>{enumeration}</bum-action></ingress>	Configures bum action. Allowed values: monitor or shutdown. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/broadcast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/multicast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/unknown-unicast
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/multicast/rate-percent
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/broadcast/rate-percent
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/broadcast/bum-action
<base_URI>/config/running/interface/{interface-type}/{interface-name}/storm-control/ingress/{protocol-type}

## Usage Guidelines

GET, POST, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/storm-control/ingress/broadcast

### Request Body

None

### Response Body

```
<ingress xmlns="urn:brocade.com:mgmt:brocade-qos-mls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%221/1%22/storm-control/ingress/broadcast">
  <protocol-type>broadcast</protocol-type>
  <rate-format>limit-percent</rate-format>
  <rate-percent>1</rate-percent>
  <bum-action>monitor</bum-action>
</ingress>
```

The following is an example of the POST operation to configure BUM Storm Control that limits ingress traffic on a specified interface.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/storm-control

### Request Body

```
<ingress><protocol-type>broadcast</protocol-type><rate-format>limit-bps</rate-format><rate-mps>(rate-limit-mps-type)</rate-mps></ingress>
```

### Response Body

None

interface/{interface-type}/{interface-name}/storm-control/ingress

The following is an example of the DELETE operation to remove BUM Storm Control.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/storm-control/ingress/broadcast

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/switchport

Configures, modifies, or retrieves the switching characteristics of the Layer 2 interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport	Sets the switching characteristics of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport	Sets the switching characteristics of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode	Sets mode of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode/vlan-mode	Sets mode of the Layer 2 interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access	Sets the interface as access. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access/vlan	Set the default VLAN for the interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk	Sets the Layer 2 interface as trunk. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed	Set the VLANs that will Xmit/Rx through Layer2. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	Allow Dot1Q VLANs to Xmit/Rx through Layer2. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/all	Allow all Dot1Q VLANs to Xmit/Rx through Layer2. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/add	Allow the specified VLANs to Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/except	Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/remove	Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag	Enable tagging. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag/native-vlan	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/native-vlan	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport	<switchport>true</switchport>	Make an interface a switchport. Supported interface types: Ethernet, Port-Channel.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode/vlan-mode	<vlan-mode>trunk</vlan-mode>	Make interface mode to trunk. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access/vlan	<vlan>101</vlan>	Set the default VLAN for the interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/all	<all>{enumeration}</all>	Make interface part of all VLAN. v
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/none	<none>{enumeration}</none>	Remove interface membership from all VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/add	<add>(unit32)</add>	Allow the specified VLANs to Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/except	<except>(unit32)</except>	Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan/remove	<remove>(unit32)</remove>	Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag	<tag />	Enable tagging. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag/native-vlan	<native-vlan>{enumeration}</native-vlan>	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/native-vlan	<native-vlan>(unit32)</native-vlan>	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport	<switchport>>true</switchport>	Make an interface a switchport. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode	<mode><vlan-mode>trunk</vlan-mode></mode>	Make interface mode to trunk. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access	<access><vlan>101</vlan></access>	Set the default VLAN for the interface. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><all>true</all></vlan>	Make interface part of all VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><none>true</none></vlan>	Remove interface membership from all VLAN. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><add>601-700</add></vlan>	Allow the specified VLANs to Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><except>651-700</except></vlan>	Allow all VLANs except the specified VLAN. Supported interface types: Ethernet, Port-Channel.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/allowed/vlan	<vlan><remove>601-650</remove></vlan>	Remove a VLAN range that Xmit/Rx. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/tag	<tag><native-vlan>true</native-vlan></tag>	Enable tagging. Supported interface types: Ethernet, Port-Channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk	<trunk><native-vlan>601</native-vlan></trunk>	Set the native VLAN characteristics. Supported interface types: Ethernet, Port-Channel.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode/vlan-mode
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access/vlan
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk/native-vlan

## Parameters

### *switchport*

Enables switching characteristics of the Layer 2 interface.

### *max*

Configures the maximum number of allowed MAC addresses.

### *native-vlan*

Specifies a VLAN to transmit and receive through the Layer 2 interface.

### *access vlan*

Specifies the VLAN ID.

### *all*

Specifies all Dot1q VLANs to add.

### *none*

Specifies 'no dot1q vlans'.

### *add*

Specifies list of VLANs to be added.

### *except*

Specifies exception list of VLANs.

### *remove*

Specifies the list of VLANs to be removed.

### *trunk-vlan-id*

Specifies the trunk VLAN ID.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Port-channel/{101}/switchport

### Request Body

None

### Response Body

```
<switchport xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Port-channel/101/switchport">true</switchport>
<switchport xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Port-channel/101/switchport">
  <mode y:self="/rest/config/running/interface/Port-channel/101/switchport/mode">
    <vlan-mode>access</vlan-mode>
  </mode>
  <access y:self="/rest/config/running/interface/Port-channel/101/switchport/access">
    <vlan>1</vlan>
  </access>
  <trunk y:self="/rest/config/running/interface/Port-channel/101/switchport/trunk">
    <allowed y:self="/rest/config/running/interface/Port-channel/101/switchport/trunk/allowed">
      <vlan y:self="/rest/config/running/interface/Port-channel/101/switchport/trunk/allowed/vlan">
        </vlan>
      </allowed>
    </trunk>
  </switchport>
```

The following is an example of the POST operation to configure the switchport.

### URI

http://host:80/rest/config/running/interface/Port-channel/{101}/switchport

### Request Body

```
<switchport>true</switchport>
```

### Response Body

None



The following is an example of the DELETE operation to remove the switchport configuration.

### *URI*

http://host:80/rest/config/running/interface/Port-channel/{101}/switchport

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/switchport/port-security

Configures, retrieves, and modifies port security on an interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	Configures port security on an interface. Valid interface types: Ethernet , Port-channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	Retrieves port security details. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/max	Retrieves the maximum number of secure MAC addresses allowed on the interface. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/port-security-mac-address	Retrieves the details of the MAC addresses used for port security on an interface port. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/port-security-mac-address/{mac-address},{vlan}	Retrieves the details of the MAC address-based VLAN classifier rule used to map to a specific VLAN. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky	Retrieves the details of sticky MAC learning. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/sticky-flag	Retrieves details of sticky MAC learning on the port that converts the dynamically learned MAC addresses to sticky secure MAC addresses. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/port-security-mac-address	Retrieves details of sticky MAC addresses. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/port-security-mac-address/{mac-address},{vlan}	Retrieves details of sticky MAC learning on the port that converts the dynamically learned MAC addresses to sticky secure MAC addresses. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/shutdown-time	Retrieves the details of configured auto recovery time for port security violation. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/violation	Retrieves the action that happens when a port security violation occurs. Valid interface types: Ethernet , Port-channel.

POST URIs	Payload	Description
<base_URI>/config/running/interface/Ethernet/{name}/switchport/port-security	<port-security-mac-address><mac-address>{mac-address-type}</mac-address><vlan>{vlan-type}</vlan></port-security-mac-address>	Configures PMS Static Secure Address. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/Ethernet/{name}/switchport	<port-security />	Configures port security on an interface. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky	<port-security-mac-address><mac-address>{mac-address-type}</mac-address><vlan>{vlan-type}</vlan></port-security-mac-address>	Configures sticky MAC learning on the port to convert the dynamically learned MAC addresses to sticky secure MAC addresses. Valid interface types: Ethernet , Port-channel.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	<port-security><max>{uint32}</max></port-security>	Configures port security on an interface with the maximum limit for the number of secure MAC addresses allowed on the interface. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security /sticky	<sticky><sticky-flag>enumeration</sticky-flag></sticky>	Configures sticky MAC learning. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	<port-security><shutdown-time>{uint32}</shutdown-time></port-security>	Configures auto recovery time for port security violation. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	<port-security><violation>{port-sec-violation}</violation></port-security>	Sets the action that happens when a port security violation occurs. Allowed values: restrict, shutdown. Valid interface types: Ethernet , Port-channel.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/max	<max>{uint32}</max>	Configures port security on an interface with the maximum limit for the number of secure MAC addresses allowed on the interface. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/sticky-flag	<sticky-flag>enumeration</sticky-flag>	Configures sticky MAC learning. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/shutdown-time	<shutdown-times>{uint32}</shutdown-time>	Configures auto recovery time for port security violation. Valid interface types: Ethernet , Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/violation	<violation>{port-sec-violation}</violation>	Set the action that happens when a port security violation occurs. Allowed values: restrict, shutdown. Valid interface types: Ethernet , Port-channel.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/max
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/sticky-flag
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/shutdown-time
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/port-security-mac-address/{mac-address},{vlan}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/sticky/port-security-mac-address/{mac-address},{vlan}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/violation

## Parameters

*interface-type*

Valid interface types: Ethernet , Port-channel.

*mac-address*

Specifies the MAC address to be that is to be configured on the secure port.

*port-security-mac-address*

Secure MAC address on the secure port.

*vlan*

Specifies a VLAN.

*max*

The maximum number of secure MAC addresses. Range is from 1 through 8192.

*sticky-flag*

Enables sticky MAC learning on the port to convert the dynamically learned MAC addresses to sticky secure MAC addresses. Boolean value.

*shutdown-time*

The amount of time in minutes, the port waits before it recovers from forced port shutdown. Range is from 1 through 15.

*violation*

The violation response action for port security on an interface. Allowed values: and .

**restrict**

Drops the packets that have unknown source addresses until you remove a sufficient number of secure MAC addresses to keep the count within the maximum MAC limit allowed on the interface.

**shutdown**

Puts the interface into the error-disabled state.

## Usage Guidelines

GET, PATCH, PUT, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security

### Request Body

None

### Response Body

```
<port-security-mac-address y:self="/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security/port-security-mac-address/3200.1110.0811%2C250">
  <mac-address>3200.1110.0811</mac-address>
  <vlan>250</vlan>
</port-security-mac-address>
<port-security-mac-address y:self="/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security/port-security-mac-address/3200.1110.0812%2C250">
  <mac-address>3200.1110.0812</mac-address>
  <vlan>250</vlan>
</port-security-mac-address>
<sticky y:self="/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security/sticky">
  <sticky-flag>true</sticky-flag>
  <port-security-mac-address y:self="/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security/sticky/port-security-mac-address/3200.1110.0001%2C250">
    <mac-address>3200.1110.0001</mac-address>
    <vlan>250</vlan>
  </port-security-mac-address>
  <port-security-mac-address y:self="/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security/sticky/port-security-mac-address/3200.1110.0002%2C250">
    <mac-address>3200.1110.0002</mac-address>
    <vlan>250</vlan>
  </port-security-mac-address>
</sticky>
<shutdown-time>5</shutdown-time>
</port-security>
```

The following example uses the POST option to configure port security.

### URI

http://host:80/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security

### Request Body

```
<port-security-mac-address><mac-address>3200.1110.0812</mac-address><vlan>250</vlan></port-security-mac-address>
```

### Response Body

None

interface/{interface-type}/{interface-name}/switchport/port-security

The following example uses the DELETE option to remove port security.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/system

Configures, modifies and retrieves packet timestamp settings.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system	Configures, modifies and retrieves packet timestamp settings. Valid interface types: Ethernet and Port-channel.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system	Displays the system settings. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/ packet-timestamp	Displays the packet-timestamp setting. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/ packet-timestamp/ingress	Displays the ingress packet-timestamp setting. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/ packet-timestamp/egress	Displays the egress packet-timestamp setting. Valid interface types: Ethernet and Port-channel.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/ packet-timestamp	<ingress>valid</ingress>	Configures the ingress setting; this specifies that a timestamp exists in all payloads that ingress an interface. Valid interface types: Ethernet and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/ packet-timestamp/egress	<egress>{egress-action}</egress>	Configures the egress setting - this specifies how a timestamp is processed when the packet is forwarded on the egress interface. Valid interface types: Ethernet and Port-channel.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/packet-timestamp/ingress
<base_URI>/config/running/interface/{interface-type}/{interface-name}/system/packet-timestamp/egress

## Parameters

### *ingress*

Configures whether or not an ingress packet has a timestamp appended to the payload that ingresses an interface. Allowed value: valid.

### *egress*

Configures how a timestamp is processed when the packet is forwarded on the egress interface. Allowed values:

#### **add**

Specifies that the time the packet ingresses the switch is appended to the end of the payload on the egress interface.

interface/{interface-type}/{interface-name}/system

**remove**

Specifies that the timestamp in the ingress payload is removed on the egress interface.

**replace**

Specifies that the timestamp in the ingress payload is replaced on the egress interface.

## Usage Guidelines

GET, POST, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the timestamp ingress and egress values.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/31:1%22/system/

### Request Body

None

### Response Body

```
<system xmlns="urn:brocade.com:mgmt:brocade-packet-timestamp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%220/31:1%22/system">
  <packet-timestamp y:self="/rest/config/running/interface/Ethernet/%220/31:1%22/system/packet-
timestamp">
    <ingress>valid</ingress>
    <egress>add</egress>
  </packet-timestamp>
</system>
```

The following is an example of the POST operation to configure the ingress value.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/31:1%22/system/packet-timestamp

### Request Body

```
<ingress>valid</ingress>
```

### Response Body

None



The following is an example of the DELETE operation to remove the ingress configuration.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%220/31:1%22/system/packet-timestamp/ingress

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/vrrp-extended-group

Configures, retrieves, and modifies a Virtual Router Redundancy Protocol Extended (VRRP-E) group.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group	Configures VRRP-E group. Supported interface type: Ve.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/virtual-mac	Virtual MAC. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/network/{network-address}/priority	Network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/network/{network-address}/priority	Virtual MAC. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval	Network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/enable	Trackport Priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/hold-time	Hold-time. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/preempt-mode	Set preempt mode for the session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/arp/unicast-request/receive	Receive unicast ARP requests. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/priority	Configures the priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/description	Characters describing the interface.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertise-backup	Enable periodic backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/backup-advertisement-interval	Enable interval for backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding/basic	Enable backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding/revert-priority	Sets the revert priority while enabling backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval-scale	Ipv4 session advertisement interval scale factor. Supported interface type: Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}	<vrrp-extended-group><vrid>{vrrpe-vrid-type}</vrid></vrrp-extended-group>	Configures VRRPE. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<virtual-ip><virtual-ipaddr>{inet:ipv4-address}</virtual-ipaddr></virtual-ip>	Virtual IPv4 address in dotted decimal. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track	<network><network-address>{inet:ipv4-prefix}</network-address></network>	Network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track	<interface><interface-type>{track-iftyp}</interface-type><interface-name>{track-ifname}</interface-name></interface>	Interface to be tracked. Supported interface type: Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/virtual-mac	<virtual-mac>{enumeration}</virtual-mac>	Virtual MAC. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/network/{network-address}/priority	<priority>{uint8}</priority>	Track priority for the network to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/track/interface/{interface-type},{interface-name}/priority	<priority>{uint8}</priority>	Track priority for the interface to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval	<advertisement-interval>{uint32}</advertisement-interval>	Advertisement interval. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/enable	<enable>{enumeration}</enable>	Enable Session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/hold-time	<hold-time>{uint32}</hold-time>	Hold-time. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/preempt-mode	<preempt-mode>{enumeration}</preempt-mode>	Set preempt mode for the session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/arp/unicast-request/receive	<receive>{enumeration}</receive>	Receive unicast ARP requests. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/priority	<priority>{uint8}</priority>	Configures the priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/description	<description>{string}</description>	Characters describing the interface. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertise-backup	<advertise-backup>{enumeration}</advertise-backup>	Enable periodic backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-	<basic>{enumeration}</basic>	Enable backup router to send traffic. Supported interface type: Ve.

PUT URIs	Payload	Description
extended-group/{vrid}/short-path-forwarding/basic		
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding/revert-priority	<revert-priority>{uint8}</revert-priority>	Sets the revert priority while enabling backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/advertisement-interval-scale	<advertisement-interval-scale>{uint32}</advertisement-interval-scale>	Ipv4 session advertisement interval scale factor. Supported interface type: Ve.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><virtual-mac>{enumeration}</virtual-mac></vrrp-extended-group>	Virtual MAC. Supported interface type: Ve.
interface/Ve/{name}/vrrp-extended-group/{vrid}/track/network/{network-address}	<network><priority>{uint8}</priority></network>	Track priority for the network to be tracked. Supported interface type: Ve.
interface/Ve/{name}/vrrp-extended-group/{vrid}/track/interface/{interface-type}, {interface-name}	<interface><priority>{uint8}</priority></interface>	Track priority for the interface to be tracked. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><preempt-mode>{enumeration}</preempt-mode></vrrp-extended-group>	Set preempt mode for the session. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/arp/unicast-request	<unicast-request><receive>{enumeration}</receive></unicast-request>	Receive unicast ARP requests. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><priority>{uint8}</priority></vrrp-extended-group>	Configures the priority. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><description>{string}</description></vrrp-extended-group>	Characters describing the interface. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><advertise-backup>{enumeration}</advertise-backup></vrrp-extended-group>	Enable periodic backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><backup-advertisement-interval>{uint32}</backup-advertisement-interval></vrrp-extended-group>	Enable interval for backup advertisement messages. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding	<short-path-forwarding><basic>{enumeration}</basic></short-path-forwarding>	Enable backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}/short-path-forwarding	<short-path-forwarding><revert-priority>{uint8}</revert-priority></short-path-forwarding>	Sets the revert priority while enabling backup router to send traffic. Supported interface type: Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group/{vrid}	<vrrp-extended-group><advertisement-interval-scale>{uint32}</advertisement-interval-scale></vrrp-extended-group>	Ipv4 session advertisement interval scale factor. Supported interface type: Ve.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ve/2/vrrp-extended-group/2

### Request Body

None

### Response Body

```
<vrrp-extended-group y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2">
  <vrid>2</vrid>
  <virtual-ip y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/virtual-ip/20.1.1.101">
    <virtual-ipaddr>20.1.1.101</virtual-ipaddr>
  </virtual-ip>
  <track y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/track">
  </track>
  <enable>true</enable>
  <preempt-mode>true</preempt-mode>
  <arp y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/arp">
    <unicast-request y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/arp/unicast-request">
      </unicast-request>
    </arp>
    <priority>101</priority>
    <short-path-forwarding y:self="/rest/config/running/interface/Ve/2/vrrp-extended-group/2/short-path-forwarding">
      </short-path-forwarding>
    </vrrp-extended-group>
```

The following is an example of the POST operation to configure VRRPE group.

### URI

http://host:80/rest/config/running/interface/Ve/100

### Request Body

```
<vrrp-extended-group><vrid>20</vrid></vrrp-extended-group>
```

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/vrrp-group

Configures, retrieves, and modifies a Virtual Router Redundancy Protocol (VRRP) group.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group	Configures a Virtual Router Redundancy Protocol (VRRP) group.. Supported interface types: Ethernet, Ve.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track/interface/{interface-type},{interface-name}/priority	Trackport Priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/advertisement-interval	Advertisement interval. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/enable	Enable Session. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/hold-time	Hold-time.Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/preempt-mode	Set preempt mode for the session. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/arp/unicast-request/receive	Receive unicast ARP requests. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/priority	Configures the priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/description	Characters describing the interface. Supported interface types: Ethernet, Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}	<vrrp-group><vrid>{vrid-type}</vrid></vrrp-group>	Configures a virtual router group (VRRP). Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<virtual-ip><virtual-ipaddr>{ip-address}</virtual-ipaddr></virtual-ip>	Virtual IPv4 address in dotted decimal. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track	<interface><interface-type>ethernet</interface-type><interface-name>{interface-name}</interface-name></interface>	Interface to be tracked. Supported interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track/interface/{interface-type},{interface-name}/priority	<priority>10</priority>	Trackport Priority.Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/advertisement-interval	<advertisement-interval>20</advertisement-interval>	Advertisement interval. Supported interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/enable	<enable>true</enable>	Enable Session. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/hold-time	<hold-time>20</hold-time>	Hold-time. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/preempt-mode	<preempt-mode>true</preempt-mode>	Set preempt mode for the session.Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/arp/unicast-request/receive	<receive>true</receive>	Receive unicast ARP requests. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/priority	<priority>103</priority>	Configures the priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/description	<description>vrrpedescription</description>	Characters describing the interface. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/use-v2-checksum	<use-v2-checksum>true</use-v2-checksum>	Enables v2 checksum computation method for VRRPv3 session. Supported interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/track/interface/{interface-type},{interface-name}/priority	<priority>{uint8}</priority>	Trackport Priority.Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/advertisement-interval	<advertisement-interval>{uint32}</advertisement-interval>	Advertisement interval. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/enable	<enable>true</enable>	Enable Session. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/hold-time	<hold-time>{uint32}</hold-time>	Hold-time. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/preempt-mode	<preempt-mode>true</preempt-mode>	Set preempt mode for the session.Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/arp/unicast-request/receive	<receive>true</receive>	Receive unicast ARP requests. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/priority	<priority>{uint8}</priority>	Configures the priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/description	<description>vrrpedescription</description>	Characters describing the interface. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}/use-v2-checksum	<use-v2-checksum>true</use-v2-checksum>	Enables v2 checksum computation method for VRRPv3 session. Supported interface types: Ethernet, Ve.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Ve/2/vrrp-group/1%2C2

### Request Body

None

### Response Body

```
<vrrp-group xmlns="urn:brocade.com:mgmt:brocade-vrrp" y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2">
  <vrid>1</vrid>
  <version>2</version>
  <virtual-ip y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/virtual-ip/20.1.1.100">
    <virtual-ipaddr>20.1.1.100</virtual-ipaddr>
  </virtual-ip>
  <track y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/track">
  </track>
  <enable>true</enable>
  <preempt-mode>true</preempt-mode>
  <arp y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/arp">
    <unicast-request y:self="/rest/config/running/interface/Ve/2/vrrp-group/1%2C2/arp/unicast-request">
      </unicast-request>
    </arp>
    <priority>101</priority>
  </vrrp-group>
```

The following is an example of the POST operation to configure virtual IPv4 address in dotted decimal.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221%22/vrrp-group/10/2

### Request Body

```
<virtual-ip><virtual-ipaddr>10.1.1.100</virtual-ipaddr></virtual-ip>
```

### Response Body

None



## History

Release version	History
17s.1.00	This API call was introduced.

# interface/Port-channel

Configures Port-channel interface.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/Port-channel/{name}	Configures the list of port-channels.

GET URIs	Description
<base_URI>/config/running/interface/Port-channel/{name}	Retrieves the pot channel.
<base_URI>/config/running/interface/Port-channel/{name}/speed	Retrieves speed of the port.
<base_URI>/config/running/interface/Port-channel/{name}/description	Retrieves interface specific description.
<base_URI>/config/running/interface/Port-channel/{name}/shutdown	Shutdown the selected interface
<base_URI>/config/running/interface/Port-channel/{name}/minimum-links	Minimum number of links.
<base_URI>/config/running/interface/Port-channel/{name}/mtu	Sets mtu value to interface.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/Port-channel/{name}/speed	<speed>1000</speed>	Configures speed of the port.
<base_URI>/config/running/interface/Port-channel/{name}/description	<description>R1toR2</description>	Configures interface specific description.
<base_URI>/config/running/interface/Port-channel/{name}/shutdown	<shutdown>>true</shutdown>	Configures the selected interface
<base_URI>/config/running/interface/Port-channel/{name}/minimum-links	<minimum-links>2</minimum-links>	Configures minimum number of links.
<base_URI>/config/running/interface/Port-channel/{name}/mtu	<mtu>5000</mtu>	Sets mtu value to interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/Port-channel/{name}	<Port-channel><speed>1000</speed></Port-channel>	Configures speed of the port.
<base_URI>/config/running/interface/Port-channel/{name}/description	<description>R1toR2</description>	Configures interface specific description.
<base_URI>/config/running/interface/Port-channel/{name}/shutdown	<shutdown>true</shutdown>	Configures the selected interface
<base_URI>/config/running/interface/Port-channel/{name}/minimum-links	<minimum-links>2</minimum-links>	Configures minimum number of links.
<base_URI>/config/running/interface/Port-channel/{name}/mtu	<mtu>5000</mtu>	Sets mtu value to interface.

DELETE URIs
<base_URI>/config/running/interface/Port-channel/{name}

DELETE URIs
<base_URI>/config/running/interface/Port-channel/{name}/speed
<base_URI>/config/running/interface/Port-channel/{name}/description
<base_URI>/config/running/interface/Port-channel/{name}/shutdown
<base_URI>/config/running/interface/Port-channel/{name}/minimum-links
<base_URI>/config/running/interface/Port-channel/{name}/mtu

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/interface/Port-channel/101/speed

### Request Body

None

### Response Body

```
<speed xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Port-channel/101/speed">1000</speed>
```

The following is an example of the PUT operation to configure interface specific description.

### URI

http://host:80/rest/config/running/interface/Port-channel/101/description

### Request Body

```
<description>R1toR2</description>
```

### Response Body

None

The following is an example of the DELETE operation to remove a port channel.

### *URI*

http://host:80/rest/config/running/interface/Port-channel/101

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/access-list

Configures, modifies, or retrieves the Internet Protocol (IP) access list configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/ip	The Internet Protocol configuration.
<base_URI>/config/running/ip/access-list/standard	Standard IP ACL configuration.
<base_URI>/config/running/ip/access-list/standard/{ACL-name}/seq	Sequence number configuration.
<base_URI>/config/running/ip/access-list/extended	Extended IP ACL configuration.
<base_URI>/config/running/ip/access-list/extended/{ACL-name}/seq	Sequence number configuration.

## Parameters

*seq*

Specifies the sequence number.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details for access list "acl2".

### URI

http://host:80/rest/config/running/ip/access-list/extended/acl2

### Request Body

None

### Response Body

```
<extended xmlns="urn:brocade.com:mgmt:brocade-ip-access-list" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ip/access-list/extended/acl2">
  <name>acl2</name>
</extended>
```

The following example uses the POST option to configure an access list "acl2".

### *URI*

http://host:80/rest/config/running/ip/access-list

### *Request Body*

```
<extended><name>acl2</name></extended>
```

### *Response Body*

None

The following example uses the DELETE option to remove the access list "acl2".

### *URI*

http://host:80/rest/config/running/ip/access-list/extended/acl2

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/as-path

Configures, retrieves, and modifies Border Gateway Protocol (BGP) AS Path filter.

## Resource URIs

URI	Description
<base_URI>/config/running/ip/as-path	Configures BGP AS Path filter.

GET URIs	Description
<base_URI>/config/running/ip/as-path	Retrieves BGP AS Path filter.
<base_URI>/config/running/ip/as-path/access-list/{name},{seq-keyword},{instance}	Retrieves BGP AS Path Access List.

POST URIs	Payload	Description
<base_URI>/config/running/ip/as-path	<access-list><name>{ip-as-path-name-t}</name><seq-keyword>{enumeration}</seq-keyword><instance>{instance-id-t}</instance><ip-action>{action-t}</ip-action><ip-reg-expr>{ip-as-path-reg-expr-t}</ip-reg-expr></access-list>	Configures BGP AS Path Access List.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/as-path/access-list/{name},{seq-keyword},{instance}	<access-list><ip-action>{action-t}</ip-action><ip-reg-expr>{ip-as-path-reg-expr-t}</ip-reg-expr></access-list>	Configures BGP AS Path Access List.

DELETE URIs
<base_URI>/config/running/ip/as-path/access-list/{name},{seq-keyword},{instance}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/as-path

### Request Body

None

### Response Body

```
<as-path xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/ip/as-path">
</as-path>
```

The following example uses the POST option to configure BGP AS Path filter. .

### URI

http://host:80/rest/config/running/config/running/ip/as-path

### Request Body

```
<access-list><name>{ip-as-path-name-t}</name><seq-keyword>{key}</seq-keyword><instance>{instance-id-t}</
instance><ip-action>{action-t}</ip-action><ip-reg-expr>{ip-as-path-reg-expr-t}</ip-reg-expr></access-
list>
```

### Response Body

None

The following example uses the DELETE option to remove BGP AS Path filter.

### URI

http://host:80/rest/config/running/ip/as-path/access-list/aclt/key/1}

### Request Body

None

### Response Body

None



## History

Release version	History
17s.1.00	This API call was introduced.

# ip/community-list

Configures, retrieves, and modifies IP community list.

## Resource URIs

URI	Description
<base_URI>/config/running/ip/community-list	Configures IP community list.

GET URIs	Description
<base_URI>/config/running/ip/community-list	Retrieves IP community list.
<base_URI>/config/running/ip/community-list/standard/{name}, {seq-keyword}, {instance}	Retrieves standard community list.
<base_URI>/config/running/ip/community-list/extended/{name}, {seq-keyword}, {instance}	Retrieves extended community list.

POST URIs	Payload	Description
<base_URI>/config/running/ip/community-list	<standard><name>{ip-community-list-name-t}</name><seq-keyword>{enumeration}</seq-keyword><instance>{instance-id-t}</instance><ip-action>{action-t}</ip-action><std-community-expr>{ip-std-community-expr-t}</std-community-expr></standard>	Configures standard community list.
<base_URI>/config/running/ip/community-list	<extended><name>{ip-community-list-name-t}</name><seq-keyword>{enumeration}</seq-keyword><instance>{instance-id-t}</instance><ip-action>{action-t}</ip-action><ip-community-reg-expr>{ip-community-reg-expr-t}</ip-community-reg-expr></extended>	Configures extended community list.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/community-list/standard/{name}, {seq-keyword}, {instance}	<standard><ip-action>{action-t}</ip-action><std-community-expr>{ip-std-community-expr-t}</std-community-expr></standard>	Configures standard community list.
<base_URI>/config/running/ip/community-list/extended/{name}, {seq-keyword}, {instance}	<extended><ip-action>{action-t}</ip-action><ip-community-reg-expr>{ip-community-reg-expr-t}</ip-community-reg-expr></extended>	Configures extended community list.

DELETE URIs
<base_URI>/config/running/ip/community-list/standard/{name}, {seq-keyword}, {instance}
<base_URI>/config/running/ip/community-list/extended/{name}, {seq-keyword}, {instance}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/community-list

### Request Body

None

### Response Body

```
<community-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ip/community-list">
</community-list>
```

The following example uses the POST option to configure IP community list.

### URI

http://host:80/rest/config/running/config/running/ip/community-list

### Request Body

```
<standard><name>{ip-community-list-name-t}</name><seq-keyword>{key}</seq-keyword><instance>{instance-id-
t}</instance><ip-action>{action-t}</ip-action><std-community-expr>{ip-std-community-expr-t}</std-
community-expr></standard>
```

### Response Body

None

The following example uses the DELETE option to remove IP community list.

### URI

http://host:80/rest/config/running/ip/community-list/standard/{ip-community-list-name-t},{key},{instance-id-t}

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/dhcp/relay

Configures, modifies, or retrieves IP Dynamic Host Configuration Protocol (DHCP).

## Resource URIs

URI	Description
<base_URI>/config/running/ip/dhcp/relay	Configures DHCP relay.

GET URIs	Description
<base_URI>/config/running/ip	Configure Internet Protocol (IP).
<base_URI>/config/running/ip/dhcp	Configures Dynamic Host Configuration Protocol (DHCP).
<base_URI>/config/running/ip/dhcp/relay/information/option	Configures DHCP relay.

POST URIs	Payload	Description
<base_URI>/config/running/ip/dhcp/relay/information	<option> </option>	Configures DHCP relay option.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/dhcp/relay/information	<option> </option>	Configures DHCP relay option.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/dhcp/relay/information	<option> </option>	Configures DHCP relay option.

DELETE URIs
<base_URI>/config/running/ip/dhcp/relay/information

## Parameters

*option*

Enables DHCP relay information.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip

### Request Body

None

### Response Body

```
<dhcp xmlns="urn:brocade.com:mgmt:brocade-dhcp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ip/dhcp">
  <relay y:self="/rest/config/running/ip/dhcp/relay">
    <information y:self="/rest/config/running/ip/dhcp/relay/information">
      <option>true</option>
    </information>
  </relay>
</dhcp>
```

The following example uses the POST option to configure IP DHCP relay option.

### URI

http://host:80/rest/config/running/ip/dhcp/relay/information

### Request Body

```
<option>true</option>
```

### Response Body

None

The following example uses the DELETE option to remove IP DHCP relay option.

### URI

http://host:80/rest/config/running/ip/dhcp/relay/information

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/extcommunity-list

Configures, retrieves, and modifies standard Border Gateway Protocol (BGP) extended community filter.

## Resource URIs

URI	Description
<base_URI>/config/running/ip/extcommunity-list	Configures a standard BGP extended community filter.

GET URIs	Description
<base_URI>/config/running/ip/extcommunity-list	Sets a standard BGP extended community filter.
<base_URI>/config/running/ip/extcommunity-list/standard/{extcommunity-list-name}	Sets a standard BGP extended community list filter.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/extcommunity-list/standard/{extcommunity-list-name}	<standard><ext-community-action>{action-t}</ext-community-action><ext-community-expr>{extcommunity-list-expr-t}</ext-community-expr></standard>	Configures a standard BGP extended community list filter.

POST URIs	Payload	Description
<base_URI>/config/running/ip/extcommunity-list	<standard><extcommunity-list-name>[ip-extcommunity-list-name-t]</extcommunity-list-name><ext-community-action>{action-t}</ext-community-action><ext-community-expr>{extcommunity-list-expr-t}</ext-community-expr></standard>	Sets a standard BGP extended community list filter.

DELETE URIs
<base_URI>/config/running/ip/extcommunity-list/standard/{extcommunity-list-name}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/extcommunity-list

### Request Body

None

### Response Body

```
<extcommunity-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ip/extcommunity-list">
</extcommunity-list>
```

The following example uses the POST option to configure standard BGP extended community filter.

### URI

http://host:80/rest/config/running/config/running/ip/extcommunity-list

### Request Body

```
<standard><extcommunity-list-name>{ip-extcommunity-list-name-t}</extcommunity-list-name><ext-community-
action>{action-t}</ext-community-action><ext-community-expr>{extcommunity-list-expr-t}</ext-community-
expr></standard>
```

### Response Body

None

The following example uses the DELETE option to remove standard BGP extended community filter.

### URI

http://host:80/rest/config/running/ip/extcommunity-list/standard/ip-extcommunity-list-name-t

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/igmp

Configures the Internet Group Management Protocol (IGMP).

## Resource URIs

URI	Description
<base_URI>/config/running/ip/igmp	Configures IGMP.

GET URIs	Description
<base_URI>/config/running/ip/igmp	Retrieves IGMP.
<base_URI>/ip/igmp/router-alert-check-disable	Disables the snooping check for the presence of the router alert option.
<base_URI>/ip/igmp/ssm-map	Retrieves the IGMPv2 Source Specific Multicast mapping.
<base_URI>/ip/igmp/ssm-map/enable	Enables the IGMPv2 Source Specific Multicast mapping.

POST URIs	Payload	Description
<base_URI>/config/running/ip/igmp/ssm-map	<igmps-prefix-list><igmps-prefix-list-name>{string}</igmps-prefix-list-name><igmps-prefix-src-addr>{source-address}</igmps-prefix-src-addr></igmps-prefix-list>	Configures prefix list for an SSM map.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/igmp/router-alert-check-disable	<router-alert-check-disable>{enumeration}</router-alert-check-disable>	Disables the snooping check for the presence of the router alert option.
<base_URI>/config/running/ip/igmp/ssm-map/enable	<enable>{enumeration}</enable>	Enables the IGMPv2 Source Specific Multicast mapping.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/igmp	<igmp><router-alert-check-disable>{enumeration}</router-alert-check-disable></igmp>	Disables the snooping check for the presence of the router alert option.
<base_URI>/config/running/ip/igmp/ssm-map	<ssm-map><enable>{enumeration}</enable></ssm-map>	Enables the IGMPv2 Source Specific Multicast mapping.

DELETE URIs
<base_URI>/config/running/ip/igmp/router-alert-check-disable
<base_URI>/config/running/ip/igmp/ssm-map/enable
<base_URI>/config/running/ip/igmp/ssm-map/igmps-prefix-list/{igmps-prefix-list-name},{igmps-prefix-src-addr}

## Parameters

*igmps-prefix-list-name*

Specifies the prefix list name.

*igmps-prefix-src-addr*

Specifies the source IP Address.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/igmp

### Request Body

None

### Response Body

```
<igmp xmlns="urn:brocade.com:mgmt:brocade-igmp-snooping" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ip/igmp">
  <ssm-map y:self="/rest/config/running/ip/igmp/ssm-map">
    <enable>true</enable>
    <igmps-prefix-list y:self="/rest/config/running/ip/igmp/ssm-map/igmps-prefix-list/ssm-map-1%2C203.0.0.10">
      <igmps-prefix-list-name>ssm-map-1</igmps-prefix-list-name>
      <igmps-prefix-src-addr>203.0.0.10</igmps-prefix-src-addr>
    </igmps-prefix-list>
  </ssm-map>
</igmp>
```

The following example uses the POST option to configure prefix list for an SSM map.

### URI

http://host:80/rest/config/running/ip/igmp/ssm-map

### Request Body

```
<igmps-prefix-list><igmps-prefix-list-name>ssm-map-230-to-239-1</igmps-prefix-list-name><igmps-prefix-src-addr> 203.0.0.10</igmps-prefix-src-addr></igmps-prefix-list>
```

### Response Body

None

The following example uses the DELETE option to remove IGMPv2 Source Specific Multicast mapping.

### *URI*

http://host:80/rest/config/running/ip/igmp/ssm-map/enable

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/prefix-list

Configures, retrieves, and modifies IP address prefix list.

## Resource URIs

URI	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	Configures IP address prefix list.

GET URIs	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	Retrieves IP address prefix list.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/ge	Retrieves minimum IP prefix length.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/le	Retrieves maximum IP prefix length.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><action-ipp>{action-t}</action-ipp><prefix-ipp>{inet:ipv4-prefix}</prefix-ipp></prefix-list>	Configures IP address prefix list.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><ge>{prefix-len-t}</ge></prefix-list>	Configures minimum IP prefix length.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><le>{prefix-len-t}</le></prefix-list>	Configures maximum IP prefix length.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/ge	<ge>{prefix-len-t}</ge>	Configures minimum IP prefix length.
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/le	<le>{prefix-len-t}</le>	Configures maximum IP prefix length.

DELETE URIs
<base_URI>/config/running/ip/prefix-list/{name},{seq-keyword},{instance}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/prefix-list/{PRLIST1},{seq},{5}

### Request Body

None

### Response Body

```
<prefix-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ip/prefix-list/PRLIST1%2Cseq%2C5">
  <name>PRLIST1</name>
  <seq-keyword>seq</seq-keyword>
  <instance>5</instance>
  <action-ipp>permit</action-ipp>
  <prefix-ipp>17.0.0.0/16</prefix-ipp>
  <ge>18</ge>
  <le>24</le>
</prefix-list>
```

The following example uses the PUT option to configure IP address prefix list.

### URI

http://host:80/rest/config/running/config/running/ip/prefix-list/{name},{seq-keyword},{instance}/ge

### Request Body

```
<ge>{prefix-len-t}</ge>
```

### Response Body

None

The following example uses the DELETE option to remove IP address prefix list.

### URI

http://host:80/rest/config/running/ip/prefix-list/{name},{seq-keyword},{instance}

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.



# ip/route

Configures, retrieves, and modifies static route to the IP routing table.

## Resource URIs

URI	Description
<base_URI>/config/running/ip/route	Configures static route to the IP routing table.

GET URIs	Description
<base_URI>/config/running/ip/route	Retrieves static route to the IP routing table.

POST URIs	Payload	Description
<base_URI>/config/running/ip/route	<static-route-nh><static-route-dest>[ip-address]</static-route-dest><static-route-next-hop>[ip-address]</static-route-next-hop></static-route-nh></static-route-nh>	Specifies the destination IPv4 address and mask in the format A.B.C.D/L (where "L" is the prefix length of the mask)
<base_URI>/config/running/ip/route	<static-route-oif><static-route-dest>[ip-address]</static-route-dest><static-route-oif-type>[enumeration]</static-route-oif-type><InterfaceNumber>[string]</InterfaceNumber></static-route-oif>	Specifies the destination IPv4 address for egress interface.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}/metric	<metric>[unit32]</metric>	Configures the cost metric of the route. Valid values range from 1 through 16.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}/distance	<distance>[unit32]</distance>	Configures the administrative distance of the route. When comparing otherwise equal routes to a destination, a Brocade device prefers lower administrative distances over higher ones.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}/tag	<tag>[unit32]</tag>	Configures the tag value of the route to use for route filtering with a route map.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}/metric	<metric>[unit32]</metric>	Configures the cost metric of the route for egress interface. Valid values range from 1 through 16.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}/distance	<distance>[unit32]</distance>	Configures the administrative distance of the route for egress interface. When comparing otherwise equal routes to a destination, a Brocade device prefers lower administrative distances over higher ones.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}/tag	<tag>[unit32]</tag>	Configures the tag value of the route to use for route filtering with a route map for egress interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}	<base_URI><static-route-nh><metric>{uint32}</metric></static-route-nh>	Configures the cost metric of the route.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}	base_URI<static-route-nh><distance>{uint32}</distance></static-route-nh>	Configures the administrative distance of the route.
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}	<base_URI><static-route-nh><tag>{uint32}</tag></static-route-nh>	Configures the tag value of the route to use for route filtering with a route map.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}	<base_URI><static-route-oif><metric>{uint32}</metric></static-route-oif>	Configures the cost metric of the route for egress interface.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}	<base_URI><static-route-oif><distance>{uint32}</distance></static-route-oif>	Configures the administrative distance of the route for egress interface.
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}	<base_URI><static-route-oif><tag>{uint32}</tag></static-route-oif>	Configures the tag value of the route to use for route filtering with a route map for egress interface.

DELETE URIs
<base_URI>/config/running/ip/route/static-route-nh/{static-route-dest},{static-route-next-hop}
<base_URI>/config/running/ip/route/static-route-oif/{static-route-dest},{static-route-oif-type},{InterfaceNumber}
<base_URI>/config/running/ip/router-id

## Parameters

### *distance*

Specifies the administrative distance of the route. When comparing otherwise equal routes to a destination, a Brocade device prefers lower administrative distances over higher ones. Valid values range from 1 through 254. The default is 1.

### **metric**

Specifies the cost metric of the route. Valid values range from 1 through 16. The default is 1.

### **tag**

Specifies the tag value of the route to use for route filtering with a route map. Valid values range from 0 through 4294967295. The default is 0.

### **static-route-dest**

Specifies the destination IPv4 address and mask in the format A.B.C.D/L (where "L" is the prefix length of the mask).

### **static-route-next-hop**

Specifies the IPv4 address of the next hop.

### **static-route-oif-type**

The egress interface type.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/route

### Request Body

None

### Response Body

```
<route xmlns="urn:brocade.com:mgmt:brocade-rtm" y:self="/rest/config/running/ip/route">
  </route>
```

The following example uses the POST option to configure static route to the IP routing table.

### URI

http://host:80/rest/config/running/config/running/ip/route

### Request Body

```
<static-route-nh><static-route-dest>13.1.1.0/24</static-route-dest><static-route-next-hop>11.1.1.2</static-route-next-hop></static-route-nh>
```

### Response Body

None

The following example uses the DELETE option to remove static route to the IP routing table.

### URI

http://host:80/rest/config/running/ip/route/static-route-nh/%2216.1.1.0/24%22%2C14.1.1.2

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ip/route/static/bfd

Configures, modifies, or retrieves Bidirectional Forwarding Detection (BFD) session information.

## Resource URIs

URI	Description
<base_URI>/config/running/ipv6/route/static/bfd	Configures, modifies, or retrieves BFD session information.

GET URIs	Description
<base_URI>/config/running/ip/route/static/bfd	Retrieves BFD session information.
<base_URI>/config/running/ip/route/static/bfd/bfd-static-route/{bfd-static-route-dest},<static><bfd><bfd-static-route><bfd-static-route-dest>10.10.10.1</bfd-static-route-dest><bfd-static-route-src>11.11.11.1</bfd-static-route-src></bfd-static-route></bfd></static><static><bfd><holdover-interval>30</holdover-interval></bfd></static><bfd-static-route-src	Route with nexthop IP address
<base_URI>/config/running/ip/route/static/bfd/holdover-interval	Holdover interval

POST URIs	Payload	Description
<base_URI>/config/running/ip/route/static/bfd	<bfd-static-route><bfd-static-route-dest>[inet:ipv4-address]</bfd-static-route-dest><bfd-static-route-src>[inet:ipv4-address]</bfd-static-route-src></bfd-static-route>	Route with nexthop IP address
<base_URI>/config/running/ip/route/static/bfd	<bfd-static-route><bfd-static-route-dest>[inet:ipv4-address]</bfd-static-route-dest><bfd-static-route-src>[inet:ipv4-address]</bfd-static-route-src></bfd-static-route>	Route with nexthop IP address

PATCH URIs	Payload	Description
<base_URI>/config/running/ip/route/static/bfd	<bfd-static-route><interval>[uint16]</interval><min-rx>[uint16]</min-rx><multiplier>[uint8]</multiplier><holdover-interval>[uint8]</holdover-interval></bfd-static-route>	Configures BFD Session.

PUT URIs	Payload	Description
<base_URI>/config/running/ip/route/static/bfd	<bfd><interval>[uint16]</interval><min-rx>[uint16]</min-rx><multiplier>[uint8]</multiplier><holdover-interval>[uint8]</holdover-interval></bfd>	Configures BFD Session.

DELETE URIs
<base_URI>/config/running/ip/route/static/bfd
<base_URI>/config/running/ip/route/static/bfd/bfd-static-route/{bfd-static-route-dest},{bfd-static-route-src}
<base_URI>/config/running/ip/route/static/bfd/holdover-interval

## Parameters

<i>bfd-interface-type</i>	Outgoing interface type
<i>bfd-interface-name</i>	Interface Number ;; slot/port, vlan#, . Port value = 0.
<i>bfd-static-route-dest</i>	Route with nexthop IP address
<i>interval</i>	Transmit interval
<i>holdover-interval</i>	Holdover interval
<i>min-rx</i>	Receive interval
<i>multiplier</i>	Multiplier value

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ip/route/static

### Request Body

None

### Response Body

```
<static xmlns="urn:brocade.com:mgmt:brocade-rtm" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/ip/route/static">
  <bfd y:self="/rest/config/running/ip/route/static/bfd">
    <bfd-static-route y:self="/rest/config/running/ip/route/static/bfd/bfd-static-route/
10.10.10.1%2C11.11.11.1">
      <bfd-static-route-dest>10.10.10.1</bfd-static-route-dest>
      <bfd-static-route-src>11.11.11.1</bfd-static-route-src>
    </bfd-static-route>
  </bfd>
</static>
```

The following example uses the PATCH option to configure a static BFD route .

### URI

http://host:80/rest/config/running/ip/route/static

### Request Body

```
<static><bfd><bfd-static-route><bfd-static-route-dest>10.10.10.1</bfd-static-route-dest><bfd-static-route-src>11.11.11.1</bfd-static-route-src></bfd-static-route></bfd></static>
```

### Response Body

None

The following example uses the DELETE option to remove a static BFD route.

### URI

http://host:80/rest/config/running/ip/route/static/bfd/bfd-static-route/10.10.10.1%2C11.11.11.1

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ipv6/access-list

Configures, modifies, or retrieves the Internet Protocol version 6 {IPv6} access list configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/ipv6	The Internet Protocol configuration.
<base_URI>/config/running/ipv6/access-list/standard	Standard IP ACL configuration.
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq	Sequence number configuration.
<base_URI>/config/running/ipv6/access-list/extended	Extended IP ACL configuration.
<base_URI>/config/running/ipv6/access-list/extended/{ACL-name}/seq	Sequence number configuration.

GET URIs	
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq/{seq-id}/src-host-ip	Get the source host ip of specific Standard ACL rule with sequence ID.
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq/{seq-id}/count	Get the information if count is configured in Standard ACL rule with sequence ID.
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq/{seq-id}/log	Get the info if log is configured in Standard ACL rule with sequence ID.
<base_URI>/config/running/ipv6/access-list/standard/{ACL-name}/seq/{seq-id}/copy-sflow	Get the info if copy-sflow is configured in Standard ACL rule with sequence ID.
<base_URI>/config/running/ipv6/access-list/extended/{ACL-name}/seq/{seq-id}/count	Enables the counting of the packets matching the rule.
<base_URI>/config/running/ipv6/access-list/extended/{ACL-name}/seq/{seq-id}/log	Packets matching the filter are sent to the CPU and a corresponding log entry is generated by enabling the logging mechanism. This parameter is only available with permit and deny.
<base_URI>/config/running/ipv6/access-list/extended/{ACL-name}/seq/{seq-id}/copy-sflow	Copy to Sflow Collector

POST URIs	Payload	Description
<base_URI>/config/running/interface/Port-channel/{name}/ipv6	<access-group><ipv6-access-list>{req_val}</ipv6-access-list><ip-direction>{req_val}</ip-direction></access-group>	Bind an ACL to a Port-channel interface
<base_URI>/config/running/interface/Ve/{name}/ipv6	<access-group><ipv6-access-list>{req_val}</ipv6-access-list><ip-direction>{req_val}</ip-direction></access-group>	Bind an ACL to a VE interface
<base_URI>/config/running/ipv6/access-list	<standard><name>{req_val}</name></standard>	Configure a Standard IPv6 ACL
<base_URI>/config/running/ipv6/access-list	<extended><name>{req_val}</name></extended>	Configure a Extended IPv6 ACL

DELETE URIs
<base_URI>/config/running/ipv6/access-list/standard/{name}
<base_URI>/config/running/ipv6/access-list/extended/{name}

DELETE URIs
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}

## Parameters

- name*  
Specifies the IPv6 access list name.
- seq*  
Specifies the sequence number.
- seq-id*  
Specifies the sequence number for the rule.
- action*  
Specifies the action to be performed. Supported actions are deny, hard-drop, and permit. Configuring deny drops traffic. Configuring hard-drop force drops traffic. Configuring permit allows traffic.
- src-host-any-sip*  
Specifies any source host IP address.
- src-host-ip*  
Specifies the source host IP address.
- count*  
Enables the counting of the packets matching the rule.
- log*  
Packets matching the filter are sent to the CPU and a corresponding log entry is generated by enabling the loggingmechanism. This parameter is only available with permit and deny.
- protocol-type*  
The type of protocol used.
- dst-host-any-dip*  
Specifies any destination host IP address..
- dst-host-ip*  
Parameter description
- vlan*  
VLAN interface number.
- parameter\_name*  
Parameter description

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the access list details.

### URI

http://host:80/rest/config/running/ipv6/access-list

### Request Body

### Response Body

```
<access-list xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/access-list">
  <extended y:self="/rest/config/running/ipv6/access-list/extended/acl1">
    <name>acl1</name>
  </extended>
</access-list>
```

The following example uses the POST option to configure an extended access list "acl1".

### URI

http://host:80/rest/config/running/ipv6/access-list

### Request Body

```
<extended><name>acl1</name></extended>
```

### Response Body

None

The following example uses the DELETE option to remove the extended access list "acl1".

### URI

http://host:80/rest/config/running/ipv6/access-list/extended/acl1

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ipv6/nd

Configures, modifies, or retrieves Neighbor Discovery (ND) commands at global level.

## Resource URIs

URI	Description
<base_URI>/config/running/ipv6/nd	Configures Neighbor Discovery commands.

GET URIs	Description
<base_URI>/config/running/ipv6/nd/global-suppress-ra	Sets global suppress-ra.
<base_URI>/config/running/ipv6/nd/ra-dns-server/{string}	Sets global DNS server option applied on all ND6 interfaces
<base_URI>/config/running/ipv6/nd/ra-domain-name/{string}/lifetime-multiplier	Set global domain name option that applied on all ND6 interfaces and applies Lifetime multiplier for DNS Search List option.

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/nd	<global-suppress-ra>(enumeration)</global-suppress-ra>	Sets globally suppress-ra.
<base_URI>/config/running/ipv6/nd	<ra-dns-server><dns-server-prefix-global>{dns-server-prefix}</dns-server-prefix-global><lifetime-multiplier>(decimal)</lifetime-multiplier></ra-dns-server>	Set global DNS server option applied on all ND6 interfaces.
<base_URI>/config/running/ipv6/nd	<ra-domain-name><domain-name-string-global>{name}</domain-name-string-global><lifetime-multiplier>(decimal)</lifetime-multiplier></ra-domain-name>	Set global domain name option that applied on all ND6 interfaces.

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/nd/ra-dns-server/{ipv6_address_of_name_server}/lifetime-multiplier	<lifetime-multiplier>(decimal)</lifetime-multiplier>	Lifetime multiplier for the DNS Server option
<base_URI>/config/running/ipv6/nd/ra-domain-name/{name}/lifetime-multiplier	<lifetime-multiplier>(decimal)</lifetime-multiplier>	Lifetime multiplier for DNS search list option.

DELETE URIs
<base_URI>/config/running/ipv6/nd/global-suppress-ra
<base_URI>/config/running/ipv6/nd/ra-dns-server/{ipv6_address_of_name_server}/lifetime-multiplier
<base_URI>/config/running/ipv6/nd/ra-dns-server/{ipv6_address_of_name_server}
<base_URI>/config/running/ipv6/nd/ra-domain-name/{name}/lifetime-multiplier
<base_URI>/config/running/ipv6/nd/ra-domain-name/{name}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ipv6/nd/global-suppress-ra

### Request Body

None

### Response Body

```
<nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ipv6/nd">
  <global-suppress-ra>true</global-suppress-ra>
  <ra-dns-server y:self="/rest/config/running/ipv6/nd/ra-dns-server/2100:21:2134::566">
    <dns-server-prefix-global>2100:21:2134::566</dns-server-prefix-global>
  </ra-dns-server>
  <ra-dns-server y:self="/rest/config/running/ipv6/nd/ra-dns-server/3600:36::1">
    <dns-server-prefix-global>3600:36::1</dns-server-prefix-global>
  </ra-dns-server>
  <ra-dns-server y:self="/rest/config/running/ipv6/nd/ra-dns-server/3600:36::11">
    <dns-server-prefix-global>3600:36::11</dns-server-prefix-global>
  </ra-dns-server>
  <ra-domain-name y:self="/rest/config/running/ipv6/nd/ra-domain-name/test.in">
    <domain-name-string-global>test.in</domain-name-string-global>
  </ra-domain-name>
  <ra-domain-name y:self="/rest/config/running/ipv6/nd/ra-domain-name/test.sk">
    <domain-name-string-global>test.sk</domain-name-string-global>
  </ra-domain-name>
  <ra-domain-name y:self="/rest/config/running/ipv6/nd/ra-domain-name/test.uk">
    <domain-name-string-global>test.uk</domain-name-string-global>
  </ra-domain-name>
  <ra-domain-name y:self="/rest/config/running/ipv6/nd/ra-domain-name/test.us">
    <domain-name-string-global>test.us</domain-name-string-global>
  </ra-domain-name>
</nd>
```

The following is an example of the POST operation to set global DNS server option applied on all ND6 interfaces.

### URI

http://host:80/rest/config/running/ipv6/nd

### Request Body

```
<ra-dns-server><dns-server-prefix-global>3300:36::11</dns-server-prefix-global><lifetime-multiplier>199</lifetime-multiplier></ra-dns-server>
```

### Response Body

None

The following is an example of the DELETE operation to remove lifetime multiplier for the DNS Server option.

**URI**

http://host:80/rest/config/running/ipv6/nd/ra-dns-server/3400:36::11/lifetime-multiplier

**Request Body**

None

**Response Body**

None

**History**

Release version	History
17s.1.00	This API call was introduced.

# ipv6/prefix-list

Configures, retrieves, and modifies IPv6 address prefix list.

## Resource URIs

URI	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	Configures IPv6 address prefix list.

GET URIs	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	Retrieves IPv6 address prefix list.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/ge	Retrieves minimum IPv6 prefix length.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/le	Retrieves maximum IPv6 prefix length.

PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><action-ipp>{action-t}</action-ipp><ipv6-prefix-ipp>{inet:ipv6-prefix}</ipv6-prefix-ipp></prefix-list>	Configures IPv6 address prefix list.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><ge>{ipv6-prefix-len-t}</ge></prefix-list>	Configures minimum IPv6 prefix length.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}	<prefix-list><le>{ipv6-prefix-len-t}</le></prefix-list>	Configures maximum IPv6 prefix length.

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/ge	<ge>{ipv6-prefix-len-t}</ge>	Configures minimum IPv6 prefix length.
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}/le	<le>{ipv6-prefix-len-t}</le>	Configures maximum IPv6 prefix length.

DELETE URIs
<base_URI>/config/running/ipv6/prefix-list/{name},{seq-keyword},{instance}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ipv6/prefix-list/{PR6LIST4},{seq},{5}/

### Request Body

```
<prefix-list xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/prefix-list/PR6LIST4%2Cseq%2C5">
  <name>PR6LIST4</name>
  <seq-keyword>seq</seq-keyword>
  <instance>5</instance>
  <action-ipp>permit</action-ipp>
  <ipv6-prefix-ipp>2001:5555:2222:4444::/64</ipv6-prefix-ipp>
  <ge>120</ge>
  <le>128</le>
</prefix-list>
```

### Response Body

None

The following example uses the PUT option to configure IPv6 address prefix list.

### URI

http://host:80/rest/config/running/config/running/ipv6/prefix-list/{PR6LIST2},{seq},{5}/ge

### Request Body

```
<ge>{ipv6-prefix-len-t}</ge>
```

### Response Body

None

The following example uses the DELETE option to remove IPv6 address prefix list.

### URI

http://host:80/rest/config/running/ipv6/prefix-list/PR6LIST4%2Cseq%2C5

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.



# ipv6/route/static/bfd

Configures, modifies, or retrieves Bidirectional Forwarding Detection (BFD) session information.

## Resource URIs

URI	Description
<base_URI>/config/running/ipv6/route/static/bfd	Configures, modifies, or retrieves BFD session information.

GET URIs	Description
<base_URI>/config/running/ipv6/route/static/bfd	Retrieves BFD session information.
<base_URI>/config/running/ipv6/route/static/bfd/bfd-ipv6-static-route/{bfd-ipv6-static-route-dest},{bfd-ipv6-static-route-src}	Route with nexthop IP address
<base_URI>/config/running/ipv6/route/static/bfd/bfd-ipv6-link-local-static-route/{bfd-ipv6-link-local-dest},{bfd-ipv6-link-local-src},{bfd-interface-type},{bfd-interface-name}	Route with nexthop IP address
<base_URI>/config/running/ipv6/route/static/bfd/holdover-interval	Holdover interval

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/route/static/bfd	<bfd-ipv6-static-route><bfd-ipv6-static-route-dest>{inet:ipv6-address}</bfd-ipv6-static-route-dest><bfd-ipv6-static-route-src>{inet:ipv6-address}</bfd-ipv6-static-route-src></bfd-ipv6-static-route>	Route with nexthop IP address
<base_URI>/config/running/ipv6/route/static/bfd	<bfd-ipv6-link-local-static-route><bfd-ipv6-link-local-dest>{inet:ipv6-address}</bfd-ipv6-link-local-dest><bfd-ipv6-link-local-src>{inet:ipv6-address}</bfd-ipv6-link-local-src><bfd-interface-type>{enumeration}</bfd-interface-type><bfd-interface-name>{string}</bfd-interface-name></bfd-ipv6-link-local-static-route>	Route with nexthop IP address

PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/route/static/bfd	<bfd-ipv6-link-local-static-route><interval>{uint16}</interval><min-rx>{uint16}</min-rx><multiplier>{uint8}</multiplier><holdover-interval>{uint8}</holdover-interval></bfd-ipv6-link-local-static-route>	Configures BFD Session.
<base_URI>/config/running/ipv6/route/static/bfd/bfd-ipv6-static-route/{bfd-ipv6-static-route-dest},{bfd-ipv6-static-route-src}/bfd-ipv6-link-local-static-route	<bfd-ipv6-static-route><interval>{uint16}</interval><min-rx>{uint16}</min-rx><multiplier>{uint8}</multiplier></bfd-ipv6-static-route>	Route with nexthop IP address

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/route/static/bfd	<bfd><interval>{uint16}</interval><min-rx>{uint16}</min-rx><multiplier>{uint8}</multiplier><holdover-interval>{uint8}</holdover-interval></bfd>	Configures BFD Session.

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/route/static/bfd/bfd-ipv6-static-route/{bfd-ipv6-static-route-dest},{bfd-ipv6-static-route-src}/bfd-ipv6-link-local-static-route	<interval><min-rx>{uint16}</min-rx><multiplier>{uint8}</multiplier></interval>	Configures Receive interval.

DELETE URIs
<base_URI>/config/running/ipv6/route/static/bfd/bfd-ipv6-static-route/{bfd-ipv6-static-route-dest},{bfd-ipv6-static-route-src}
<base_URI>/config/running/ipv6/route/static/bfd/bfd-ipv6-link-local-static-route/{bfd-ipv6-link-local-dest},{bfd-ipv6-link-local-src},{bfd-interface-type},{bfd-interface-name}
<base_URI>/config/running/ipv6/route/static/bfd/holdover-interval

## Parameters

- bfd-interface-type*  
Outgoing interface type
- bfd-interface-name*  
Interface Number ;; slot/port, vlan#, . Port value = 0.
- bfd-ipv6-static-route*  
Route with nexthop IP address
- interval*  
Transmit interval
- holdover-interval*  
Holdover interval
- min-rx*  
Receive interval
- multiplier*  
Multiplier value

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ipv6/route/static

### Request Body

None

### Response Body

```
<static xmlns="urn:brocade.com:mgmt:brocade-ipv6-rtm" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ipv6/route/static">
  <bfd y:self="/rest/config/running/ipv6/route/static/bfd">
    <holdover-interval>30</holdover-interval>
  </bfd>
</static>
```

The following example uses the PATCH option to configure the holdover interval for a static BFD route .

### URI

http://host:80/rest/config/running/ipv6/route/static

### Request Body

```
<static><bfd><holdover-interval>30</holdover-interval></bfd></static>
```

### Response Body

None

The following example uses the DELETE option to remove the holdover interval for a static BFD route.

### URI

http://host:80/rest/config/running/ipv6/route/static/bfd/holdover-interval

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ipv6/router/ospf

Configures, retrieves, and modifies Open Shortest Path First (OSPF) version 3.

## Resource URIs

URI	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}	Configures Open Shortest Path First (OSPF) version 3.

GET URIs	Description
<base_URI>/config/running/ipv6/router/ospf	Retrieves Open Shortest Path First (OSPF) version 3 details.
<base_URI>/config/running/ipv6/router/ospf/{vrf}	Displays the name of the VRF
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}	Displays OSPF router area address
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/normal	Displays the normal area for an area ID.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	Displays an NSSA area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/nssa-area-metric	Display's NSSAs advertised stub route metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate	Control distribution of default information.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate/metric	Displays the OSPF metric .
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate/metric-type	Displays the OSPF metric type.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/no-redistribution	Do not send redistributed LSA into nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/no-summary	Do not send summary LSA into nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/translator-always	Set NSSA translator role.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/translator-interval	NSSA translator stability interval (sec). Decimal value, range 10-60 seconds. Default is 40s.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub	Displays a stub area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub/no-summary	Do not send summary LSA into stub area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub/stub-area-metric	Displays Stub area's advertised route metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication	Authentication of OSPF messages.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}	Define a virtual link and its parameters.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/hello-interval	Displays the time between hello packets that the router sends on an interface. Decimal value, range 1-65535 seconds. Default is 10 seconds.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/dead-interval	Decimal value, range 3-65535 seconds. Default is 40 seconds.

GET URIs	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/hello-jitter	Diaplsys the allowed jitter between hello packets. Decimal value, range 1%-50%. Default is 10%.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/retransmit-interval	Displays time between Link State Advertisement(LSA) retransmissions for adjacencies belonging to the interface. Decimal value, range 1-3600 seconds. Default is 5 seconds.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/transmit-delay	Displays the estimated time required to send an LSA on the interface.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication	Displays the authentication details.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}	Defines or undefines a type-3 address range (ABR only).
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}/range-effect	Advertise this type-3 summarization
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}/cost	Displays area range cost.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/auto-cost	Calculate OSPFv3 interface cost according to bandwidth.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/auto-cost/reference-bandwidth	Displays Reference-bandwidth in Mbits per second. Range 1 - 4294967.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/database-overflow-interval	Displays Poll Interval in Seconds. Range 0 - 86400 seconds. Default is 10.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate	Controls distribution of default information.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/always	Always advertise default route.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/metric	Displays OSPF metric. Range 0-65535.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/metric-type	OSPF metric type for default route.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-metric	Displays Default metric. Range 0-65535.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-passive-interface	Set OSPF interface passive.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distance/{route-type}	Defines an administrative distance.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list	Prevent routes from being learnt by OSPFv3.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/route-map	Use route-map to control routes learned by OSPFv3.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/route-map/in	Inbound Filtering.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/prefix-list	Use prefix list to control routes learned by OSPFv3
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/prefix-list/in	Inbound Filtering.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/external-lsdb-limit	External Link State Database Limit. Range 1-250000. Default is 250000.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/key-add-remove-interval	Display add/remove interval in seconds.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/key-rollover-interval	Display new key rollover interval in seconds. Range 0-14400. Default is 300.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log	Enables logging OSPF activities.

GET URIs	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/adjacency	Enables logging adjacency changes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/adjacency/dr-only	Enables logging adjacency changes for Designated Router interfaces only.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/all	Enables logging everything.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet	Enables logging Bad packets.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet/checksum	Enables logging bad checksum packets.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/database	Enables logging LSA activity.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/retransmit	Enables logging retransmit activity.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/metric-type	OSPF metric type for redistributed routes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	Enables logging route redistribution.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected	Displays Connected routes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/route-map	Displays Route map reference.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric	Displays OSPF metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric-type	Displays OSPF Metric type.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static	Displays Static routes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/route-map	Displays Route map reference.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric	Displays OSPF metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric-type	Displays OSPF Metric type.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp	Displays BGP Routes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/route-map	Displays Route map reference.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/metric	Displays OSPF metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/metric-type	Displays OSPF Metric type.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf	Displays OSPF routes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/route-map	Displays Route map reference.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/metric	Displays OSPF metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/metric-type	Displays OSPF Metric type.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/summary-address/{summary-address-value}	Displays IP address summaries.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers	Adjusts routing timers.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/lsa-group-pacing	Interval between group of LSA being refreshed or maxaged. Range 10-1800. Default is 240.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/spf	Displays OSPF SPF timers.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/spf/spf-hold-time	Displays hold time (0-65535 sec) between consecutive SPF calculations.

GET URIs	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/nonstop-routing	Returns true if nonstop-routing capability is enabled.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/maximum-paths	Displays maximum paths. Range 1-64. Default is 8.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric	Stub Router Advertisement
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa	The maximum metric advertisement in Router LSAs.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/all-lsas	Replaces Metric in all External and Summary LSAs with default max metric value.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/external-lsa	Replaces Metric in External LSA with max metric value.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/external-lsa/external-lsa-value	Indicates the metric of all external type 5 and type 7 LSAs
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/summary-lsa	Replaces Metric in Summary LSA with max metric value.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/summary-lsa/summary-lsa-value	Displays the metric of all summary type 3 and type 4 LSAs.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/include-stub	Configure include-stub for max-metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup	Apply this on OSPF startup.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup/on-startup-time	Displays the time to advertise maximum metric. Range 5 - 86400 seconds.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup/wait-for-bgp	Advertise maximum metric until BGP has converged (or 600 seconds)
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd	Displays information on BFD for OSPFv3 on all OSPFv3 enabled interfaces.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd/bfd-enable	Returns true if BFD is enabled.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd/holdover-interval	Displays BFD Holdover Interval.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf	Open Shortest Path First (OSPF). Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/area	Displays OSPF areas. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface{interface-type}/{interface-name}/ipv6/ospf/active	Displays Active information. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface{interface-type}/{interface-name}/ipv6/ospf/passive	Displays Passive information. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/cost	Displays cost. Range 1-65535. Default is 1. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/instance	Displays Instance ID. Range 0-255. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/mtu-ignore	Disables OSPF MTU mismatch detection. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface{interface-type}/{interface-name}/ipv6/ospf/network	Broadcast interface mode. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/priority	Displays Interface priority. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/suppress-linklsa	Suppress link LSA advertisements. Interface types are Ethernet, Ve, and Loopback.



GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication	Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec	Displays ipsec authentication for the interface. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec/key-add-remove-interval	Displays Key add/remove interval in seconds. Range 0-14400. Default is 300. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/hello-interval	Displays hello interval. Range 1-65535 seconds. Default is 10 seconds. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/dead-interval	Displays Dead interval. Range 3-65535 seconds. Default is 40 seconds. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface{interface-type}/{interface-name}/ipv6/ospf/hello-jitter	Displays Hello Jitter. Range 1%-50%. Default is 10%. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/retransmit-interval	Displays Retransmit interval. Range 1-3600 seconds. Default is 5 seconds. Interface types are Ethernet, Ve, and Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/transmit-delay	Displays Transmit Delay. Range 0-3600 seconds. Default is 1 second. Interface types are Ethernet, Ve, and Loopback.

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/router	<ospf><vrf>{common-def:vrf-name}</vrf></ospf>	Configures OSPF instance for the VRF.
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<area><area-id>{ospf:ospf-area-id}</area-id></area>	Sets the OSPF router area id
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}	<nssa />	Specifies an nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	<default-information-originate />	Controls distribution of default information
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}	<virtual-link><virtual-link-neighbor>{inet:ipv4-address}</virtual-link-neighbor></virtual-link>	Define a virtual link and its parameters.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}	<range><range-address>{common-def:ipv6-address-prefix}</range-address></range>	Defines or undefines a type-3 address range (ABR only).
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<default-information-originate />	Controls distribution of default information.
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<distance><route-type>{ospf:route-type-enum}</route-type><distance-value>{uint32}</distance-value></distance>	Defines an administrative distance
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log	<adjacency />	Logging adjacency changes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log	<bad-packet />	Logging Bad packets
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	<connected />	Connected routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	<static />	Static routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	<bgp />	BGP routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	<ospf />	OSPF routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<summary-address><summary-address-value>{common-def:ipv6-address-prefix}</	Configure IP address summaries

POST URIs	Payload	Description
	summary-address-value></summary-address>	
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric	<router-lsa />	The maximum metric advertisement in Router LSAs
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa	<external-lsa />	Replace Metric in External LSA with max metric value
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa	<summary-lsa />	Replace Metric in Summary LSA with max metric value
<base_URI>/config/running	<spi><ah>{algorithm-type-ah}</ah><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running	<spi><no-encrypt>{enumeration}</no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key and configure ipsec authentication for the interface.
<base_URI>/config/running	<spi><key>{ipsec-authentication-hexkey-string}</key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Key used for ah.
<base_URI>/config/running	<spi><esp>{algorithm-type-esp}</esp><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running	<spi><esp-no-encrypt>{enumeration}</esp-no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running	<spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Hexadecimal key string for ESP
<base_URI>/config/running	<spi><esp-auth>{algorithm-type-ah}</esp-auth><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running	<spi><no-encrypt>{enumeration}</no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running	<spi><key>{ipsec-authentication-hexkey-string}</key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Hexadecimal key string for authentication algorithm
<base_URI>/config/running	<spi><ah>{algorithm-type-ah}</ah><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running	<spi><no-encrypt>{enumeration}</no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running	<spi><key>{ipsec-authentication-hexkey-string}</key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Key used for ah.
<base_URI>/config/running	<spi><esp>{algorithm-type-esp}</esp><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running	<spi><esp-no-encrypt>{enumeration}</esp-no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key.
<base_URI>/config/running	<spi><esp-key>{ipsec-authentication-hexkey-string}</esp-	Security Parameter Index with Hexadecimal key string for ESP

POST URIs	Payload	Description
	key><ipsec><disable>{enumeration}</disable></ipsec></spi>	
<base_URI>/config/running	<spi><esp-auth>{algorithm-type-ah}</esp-auth><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running	<spi><no-encrypt>{enumeration}</no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running	<spi><key>{ipsec-authentication-hexkey-string}</key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Hexadecimal key string for authentication algorithm
<base_URI>/config/running	<spi><ah>{algorithm-type-ah}</ah><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running	<spi><no-encrypt>{enumeration}</no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running	<spi><key>{ipsec-authentication-hexkey-string}</key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Key used for ah.
<base_URI>/config/running	<spi><esp>{algorithm-type-esp}</esp><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running	<spi><esp-no-encrypt>{enumeration}</esp-no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key.
<base_URI>/config/running	<spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Hexadecimal key string for ESP
<base_URI>/config/running	<spi><esp-auth>{algorithm-type-ah}</esp-auth><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running	<spi><no-encrypt>{enumeration}</no-encrypt><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running	<spi><key>{ipsec-authentication-hexkey-string}</key><ipsec><disable>{enumeration}</disable></ipsec></spi>	Security Parameter Index with Hexadecimal key string for authentication algorithm

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/normal	<normal>{enumeration}</normal>	Sets the OSPF router area id
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/nssa-area-metric	<nssa-area-metric>{uint32}</nssa-area-metric>	Specifies an nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate/metric	<metric>{uint32}</metric>	Controls distribution of default information
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate/metric-type	<metric-type>{ospf:metric-type}</metric-type>	Type of the metric

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/no-redistribution	<no-redistribution>{enumeration}</no-redistribution>	Do not send redistributed LSA into nssa area
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/no-summary	<no-summary>{enumeration}</no-summary>	Do not send summary LSA into nssa area
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/translator-always	<translator-always>{enumeration}</translator-always>	Set nssa translator role
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/translator-interval	<translator-interval>{common-def:time-interval-sec}</translator-interval>	Nssa translator stability interval
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub/no-summary	<no-summary>{enumeration}</no-summary>	Do not send summary LSA into stub area
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub/stub-area-metric	<stub-area-metric>{uint32}</stub-area-metric>	Stub area's advertised route metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><ah>{algorithm-type-ah}</ah></spi>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><no-encrypt>{enumeration}</no-encrypt></spi>	Security Parameter Index without encrypting the key.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><key>{ipsec-authentication-hexkey-string}</key></spi>	Security Parameter Index with Key used for ah.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><esp>{algorithm-type-esp}</esp></spi>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><esp-no-encrypt>{enumeration}</esp-no-encrypt></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key></spi>	Security Parameter Index with Hexadecimal key string for ESP
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><esp-auth>{algorithm-type-ah}</esp-auth></spi>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><no-encrypt>{enumeration}</no-encrypt></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<spi><key>{ipsec-authentication-hexkey-string}</key></spi>	Security Parameter Index with Hexadecimal key string for authentication algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/hello-interval	<hello-interval>{common-def:time-interval-sec}</hello-interval>	Configures the time between hello packets that the router sends on an interface.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/dead-interval	<dead-interval>{common-def:time-interval-sec}</dead-interval>	Configures the time a neighbor router waits for a hello packet from the current router before declaring the router down.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/hello-jitter	<hello-jitter>{uint32}</hello-jitter>	Sets the allowed jitter between hello packets.

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/retransmit-interval	<retransmit-interval>{common-def:time-interval-sec}</retransmit-interval>	Time between Link State Advertisement (LSA) retransmissions for adjacencies belonging to the interface.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/transmit-delay	<transmit-delay>{common-def:time-interval-sec}</transmit-delay>	Estimated time required to send an LSA on the interface.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><ah>{algorithm-type-ah}</ah></spi>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><no-encrypt>{enumeration}</no-encrypt></spi>	Security Parameter Index without encrypting the key.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><key>{ipsec-authentication-hexkey-string}</key></spi>	Security Parameter Index with Key used for ah.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><esp>{algorithm-type-esp}</esp></spi>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><esp-no-encrypt>{enumeration}</esp-no-encrypt></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key></spi>	Security Parameter Index with Hexadecimal key string for ESP
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><esp-auth>{algorithm-type-ah}</esp-auth></spi>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><no-encrypt>{enumeration}</no-encrypt></spi>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<spi><key>{ipsec-authentication-hexkey-string}</key></spi>	Security Parameter Index with Hexadecimal key string for authentication algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}/range-effect	<range-effect>{enumeration}</range-effect>	Advertise this type-3 summarization
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}/cost	<cost>{ospf:range-metric}</cost>	Configure area range cost
<base_URI>/config/running/ipv6/router/ospf/{vrf}/auto-cost/reference-bandwidth	<reference-bandwidth>{ospf:band-width}</reference-bandwidth>	Reference-bandwidth in Mbits per second
<base_URI>/config/running/ipv6/router/ospf/{vrf}/database-overflow-interval	<database-overflow-interval>{common-def:time-interval-sec}</database-overflow-interval>	Poll Interval in Seconds
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/always	<always>{enumeration}</always>	Always advertise default route
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/metric	<metric>{uint32}</metric>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate/metric-type	<metric-type>{ospf:metric-type}</metric-type>	OSPF metric type for default route

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-metric	<default-metric>{uint32}</default-metric>	Default metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-passive-interface	<default-passive-interface>{enumeration}</default-passive-interface>	Set OSPF interface passive
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/route-map	<route-map><distribute-list-route-map-name>{common-def.name-string63}</distribute-list-route-map-name><in>{enumeration}</in></route-map>	Use route-map to control routes learned by OSPFv3
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/prefix-list	<prefix-list><distribute-list-prefix-list-name>{common-def.name-string63}</distribute-list-prefix-list-name><in>{enumeration}</in></prefix-list>	Use prefix list to control routes learned by OSPFv3
<base_URI>/config/running/ipv6/router/ospf/{vrf}/external-lsdb-limit	<external-lsdb-limit>{uint32}</external-lsdb-limit>	External Link State Database Limit
<base_URI>/config/running/ipv6/router/ospf/{vrf}/key-add-remove-interval	<key-add-remove-interval>{common-def.time-interval-sec}</key-add-remove-interval>	Key add or remove interval in seconds
<base_URI>/config/running/ipv6/router/ospf/{vrf}/key-rollover-interval	<key-rollover-interval>{common-def.time-interval-sec}</key-rollover-interval>	New key rollover interval in seconds.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/adjacency/dr-only	<dr-only>{enumeration}</dr-only>	Logging only Designated Router interfaces' adjacency changes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/all	<all>{enumeration}</all>	Logging everything
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet/checksum	<checksum>{enumeration}</checksum>	Logging bad checksum packets
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/database	<database>{enumeration}</database>	Logging LSA activity
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/retransmit	<retransmit>{enumeration}</retransmit>	Logging retransmit activity
<base_URI>/config/running/ipv6/router/ospf/{vrf}/metric-type	<metric-type>{ospf.metric-type}</metric-type>	OSPFv3 metric type for redistributed routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/route-map	<route-map>{common-def.name-string63}</route-map>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric	<metric>{uint32}</metric>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected/metric-type	<metric-type>{ospf.metric-type}</metric-type>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/route-map	<route-map>{common-def.name-string63}</route-map>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric	<metric>{uint32}</metric>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static/metric-type	<metric-type>{ospf.metric-type}</metric-type>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/route-map	<route-map>{common-def.name-string63}</route-map>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/metric	<metric>{uint32}</metric>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp/metric-type	<metric-type>{ospf.metric-type}</metric-type>	Type of the metric

PUT URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/route-map	<route-map>{common-def:name-string63}</route-map>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/metric	<metric>{uint32}</metric>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf/metric-type	<metric-type>{ospf:metric-type}</metric-type>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/lsa-group-pacing	<lsa-group-pacing>{common-def:time-interval-sec}</lsa-group-pacing>	Interval between group of LSA being refreshed or maxaged
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/spf	<spf><spf-delay>{common-def:time-interval-sec}</spf-delay><spf-hold-time>{common-def:time-interval-sec}</spf-hold-time></spf>	OSPFv3 SPF timers
<base_URI>/config/running/ipv6/router/ospf/{vrf}/nonstop-routing	<nonstop-routing>{enumeration}</nonstop-routing>	Enable nonstop-routing capability
<base_URI>/config/running/ipv6/router/ospf/{vrf}/maximum-paths	<maximum-paths>{uint32}</maximum-paths>	Maximum path.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/all-lsas	<all-lsas>{enumeration}</all-lsas>	Replace Metric in all External and Summary LSAs with default max metric value
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/external-lsa/external-lsa-value	<external-lsa-value>{uint32}</external-lsa-value>	Indicates the metric of all external type 5 and type 7 LSAs
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/summary-lsa/summary-lsa-value	<summary-lsa-value>{uint32}</summary-lsa-value>	Metric of all summary type 3 and type 4 LSAs
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/include-stub	<include-stub>{enumeration}</include-stub>	Configure include-stub for max-metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup/on-startup-time	<on-startup-time>{uint32}</on-startup-time>	Amount of time to advertise maximum metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup/wait-for-bgp	<wait-for-bgp>{enumeration}</wait-for-bgp>	Advertise maximum metric until BGP has converged or 600 seconds
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd/bfd-enable	<bfd-enable>{enumeration}</bfd-enable>	Enables BFD.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd/holdover-interval	<holdover-interval>{common-def:time-interval-sec}</holdover-interval>	Sets BFD Holdover Interval.

PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}	<area><normal>{enumeration}</normal></area>	Sets the OSPF router area id
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	<nssa><nssa-area-metric>{uint32}</nssa-area-metric></nssa>	Specifies an nssa area.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate	<default-information-originate><metric>{uint32}</metric></default-information-originate>	Controls distribution of default information
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa/default-information-originate	<default-information-originate><metric-type>{ospf:metric-type}</metric-type></default-information-originate>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	<nssa><no-redistribution>{enumeration}</no-redistribution></nssa>	Do not send redistributed LSA into nssa area



PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	<nssa><no-summary>{enumeration}</no-summary></nssa>	Do not send summary LSA into nssa area
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	<nssa><translator-always>{enumeration}</translator-always></nssa>	Set nssa translator role
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/nssa	<nssa><translator-interval>{common-def:time-interval-sec}</translator-interval></nssa>	Nssa translator stability interval
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub	<stub><no-summary>{enumeration}</no-summary></stub>	Do not send summary LSA into stub area
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/stub	<stub><stub-area-metric>{uint32}</stub-area-metric></stub>	Stub area's advertised route metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><ah>{algorithm-type-ah}</ah></authentication>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>	Security Parameter Index without encrypting the key.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>	Security Parameter Index with Key used for ah.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><esp>{algorithm-type-esp}</esp></authentication>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><esp-no-encrypt>{enumeration}</esp-no-encrypt></authentication>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key></authentication>	Security Parameter Index with Hexadecimal key string for ESP
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><esp-auth>{algorithm-type-ah}</esp-auth></authentication>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/authentication/virtual-link	<authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>	Security Parameter Index with Hexadecimal key string for authentication algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}	<virtual-link><hello-interval>{common-def:time-interval-sec}</hello-interval></virtual-link>	Configures the time between hello packets that the router sends on an interface.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}	<virtual-link><dead-interval>{common-def:time-interval-sec}</dead-interval></virtual-link>	Configures the time a neighbor router waits for a hello packet from the current router before declaring the router down.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}	<virtual-link><hello-jitter>{uint32}</hello-jitter></virtual-link>	Sets the allowed jitter between hello packets.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}	<virtual-link><retransmit-interval>{common-def:time-interval-sec}</retransmit-interval></virtual-link>	Time between Link State Advertisement (LSA) retransmissions for adjacencies belonging to the interface.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}	<virtual-link><transmit-delay>{common-def:time-interval-sec}</transmit-delay></virtual-link>	Estimated time required to send an LSA on the interface.



PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><ah>{algorithm-type-ah}</ah></authentication>	Security Parameter Index specifying the authentication algorithm to use.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>	Security Parameter Index without encrypting the key.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>	Security Parameter Index with Key used for ah.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><esp>{algorithm-type-esp}</esp></authentication>	Security Parameter Index specifying Encapsulating Security Payload (ESP)
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><esp-no-encrypt>{enumeration}</esp-no-encrypt></authentication>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><esp-key>{ipsec-authentication-hexkey-string}</esp-key></authentication>	Security Parameter Index with Hexadecimal key string for ESP
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><esp-auth>{algorithm-type-ah}</esp-auth></authentication>	Security Parameter Index using Authentication Algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><no-encrypt>{enumeration}</no-encrypt></authentication>	Security Parameter Index without encrypting the key
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/virtual-link/{virtual-link-neighbor}/authentication/range	<authentication><spi>{spi-value-type}</spi><key>{ipsec-authentication-hexkey-string}</key></authentication>	Security Parameter Index with Hexadecimal key string for authentication algorithm
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}	<range><range-effect>{enumeration}</range-effect></range>	Advertise this type-3 summarization
<base_URI>/config/running/ipv6/router/ospf/{vrf}/area/{area-id}/range/{range-address}	<range><cost>{ospf.range-metric}</cost></range>	Configure area range cost
<base_URI>/config/running/ipv6/router/ospf/{vrf}/auto-cost	<auto-cost><reference-bandwidth>{ospf.band-width}</reference-bandwidth></auto-cost>	Reference-bandwidth in Mbits per second
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><database-overflow-interval>{common-def.time-interval-sec}</database-overflow-interval></ospf>	Poll Interval in Seconds
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate	<default-information-originate><always>{enumeration}</always></default-information-originate>	Always advertise default route
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate	<default-information-originate><metric>{uint32}</metric></default-information-originate>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/default-information-originate	<default-information-originate><metric-type>{ospf.metric-type}</metric-type></default-information-originate>	OSPF metric type for default route
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><default-metric>{uint32}</default-metric></ospf>	Default metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><default-passive-interface>{enumeration}</default-passive-interface></ospf>	Set OSPF interface passive

PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distance/{route-type}	<distance><distance-value>{uint32}</distance-value></distance>	Distance for the given type of routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/route-map	<route-map><distribute-list-route-map-name>{common-def.name-string63}</distribute-list-route-map-name><in>{enumeration}</in></route-map>	Use route-map to control routes learned by OSPFv3
<base_URI>/config/running/ipv6/router/ospf/{vrf}/distribute-list/prefix-list	<prefix-list><distribute-list-prefix-list-name>{common-def.name-string63}</distribute-list-prefix-list-name><in>{enumeration}</in></prefix-list>	Use prefix list to control routes learned by OSPFv3
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><external-lsdb-limit>{uint32}</external-lsdb-limit></ospf>	External Link State Database Limit
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><key-add-remove-interval>{common-def.time-interval-sec}</key-add-remove-interval></ospf>	Key add or remove interval in seconds
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><key-rollover-interval>{common-def.time-interval-sec}</key-rollover-interval></ospf>	New key rollover interval in seconds.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/adjacency	<adjacency><dr-only>{enumeration}</dr-only></adjacency>	Logging only Designated Router interfaces' adjacency changes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log	<log><all>{enumeration}</all></log>	Logging everything
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log/bad-packet	<bad-packet><checksum>{enumeration}</checksum></bad-packet>	Logging bad checksum packets
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log	<log><database>{enumeration}</database></log>	Logging LSA activity
<base_URI>/config/running/ipv6/router/ospf/{vrf}/log	<log><retransmit>{enumeration}</retransmit></log>	Logging retransmit activity
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><metric-type>{ospf.metric-type}</metric-type></ospf>	OSPFv3 metric type for redistributed routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected	<connected><route-map>{common-def.name-string63}</route-map></connected>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected	<connected><metric>{uint32}</metric></connected>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/connected	<connected><metric-type>{ospf.metric-type}</metric-type></connected>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static	<static><route-map>{common-def.name-string63}</route-map></static>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static	<static><metric>{uint32}</metric></static>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/static	<static><metric-type>{ospf.metric-type}</metric-type></static>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp	<bgp><route-map>{common-def.name-string63}</route-map></bgp>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp	<bgp><metric>{uint32}</metric></bgp>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/bgp	<bgp><metric-type>{ospf.metric-type}</metric-type></bgp>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf	<ospf><route-map>{common-def.name-string63}</route-map></ospf>	Route map reference

PATCH URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf	<ospf><metric>{uint32}</metric></ospf>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/ospf	<ospf><metric-type>{ospf:metric-type}</metric-type></ospf>	Type of the metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers	<timers><lsa-group-pacing>{common-def:time-interval-sec}</lsa-group-pacing></timers>	Interval between group of LSA being refreshed or maxaged
<base_URI>/config/running/ipv6/router/ospf/{vrf}/timers/spf	<spf><spf-delay>{common-def:time-interval-sec}</spf-delay><spf-hold-time>{common-def:time-interval-sec}</spf-hold-time></spf>	OSPFv3 SPF timers
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><nonstop-routing>{enumeration}</nonstop-routing></ospf>	Enable nonstop-routing capability
<base_URI>/config/running/ipv6/router/ospf/{vrf}	<ospf><maximum-paths>{uint32}</maximum-paths></ospf>	Maximum path.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa	<router-lsa><all-lsas>{enumeration}</all-lsas></router-lsa>	Replace Metric in all External and Summary LSAs with default max metric value
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/external-lsa	<external-lsa><external-lsa-value>{uint32}</external-lsa-value></external-lsa>	Indicates the metric of all external type 5 and type 7 LSA's
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/summary-lsa	<summary-lsa><summary-lsa-value>{uint32}</summary-lsa-value></summary-lsa>	Metric of all summary type 3 and type 4 LSAs
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa	<router-lsa><include-stub>{enumeration}</include-stub></router-lsa>	Configure include-stub for max-metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup	<on-startup><on-startup-time>{uint32}</on-startup-time></on-startup>	Amount of time to advertise maximum metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/max-metric/router-lsa/on-startup	<on-startup><wait-for-bgp>{enumeration}</wait-for-bgp></on-startup>	Advertise maximum metric until BGP has converged or 600 seconds
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd	<bfd><bfd-enable>{enumeration}</bfd-enable></bfd>	Enables BFD.
<base_URI>/config/running/router/ospf/{vrf}/bfd	<bfd><holdover-interval>{uint8}</holdover-interval></bfd>	Sets holdover interval for BFD.

DELETE URIs
<base_URI>/config/running/ipv6/router/ospf/{vrf}/bfd/bfd-enable
<base_URI>/config/running/router/ospf/{vrf}/bfd/holdover-interval

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/ipv6/router/ospf

### *Request Body*

None

### *Response Body*

```
<ospf xmlns="urn:brocade.com:mgmt:brocade-ospfv3" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ipv6/router/ospf/default-vrf">
  <vrf>default-vrf</vrf>
</ospf>
```

The following example uses the POST option to configure an OSPF instance for the VRF.

### *URI*

http://host:80/rest/config/running/config/running/ipv6/router

### *Request Body*

```
<ospf><vrf>default-vrf</vrf></ospf>
```

### *Response Body*

None

The following example uses the DELETE option to configure an OSPF instance for the VRF.

### *URI*

http://host:80/rest/config/running/config/running/ipv6/router/ospf

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ldap-server

Configures, modifies, or retrieves Lightweight Directory Access Protocol (LDAP) server settings.

## Resource URIs

URI	Description
<base_URI>/config/running/ldap-server	LDAP server configuration.
<base_URI>/config/running/ldap-server/host	LDAP Server for AAA. Refer to ldap-server/host for information.
<base_URI>/config/running/ldap-server/maprole	Maps a role to a group. Refer to ldap-server/maprole for information.

## Parameters

*host*

Configures a LDAP server for AAA.

*maprole*

Maps a role to the group.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ldap-server

### Request Body

None

### Response Body

```
<ldap-server xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://
brocade.com:rest" y:self="/rest/config/
running/ldap-server">
  <host y:self="/rest/config/running/ldap-server/host/inetaddress"/>
  <maprole y:self="/rest/config/running/ldap-server/maprole"/>
</ldap-server>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# ldap-server/host

Configures, modifies, or retrieves Lightweight Directory Access Protocol (LDAP) server for authentication, authorization, and accounting (AAA) settings.

## Resource URIs

URI	Description
<base_URI>/config/running/ldap-server/host	Configures LDAP server host name.

## Parameters

*hostname*

LDAP server host name.

*port*

TCP authentication port. The number of characters can range from 1 through 255.

*retries*

Number of retries for this server connection. The number of retries can range from 0 through 100. The default number of retries is 5.

*timeout*

Number of retries for this server connection. The number of retries can range from 0 through 100. The default number of retries is 5.

*use-vrf*

Specifies the VRF name.

*basedn*

Base domain name. The number of characters can range from 1 through 255.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ldap-server/host

### Request Body

None

### Response Body

```
<host xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ldap-server/host/10.20.237.4%2Cmgmt-vrf">
  <hostname>10.20.237.4</hostname>
  <use-vrf>mgmt-vrf</use-vrf>
</host>
```

The following is an example of the POST operation to add an LDAP server to the client server list.

### URI

http://host:80/rest/config/running/ldap-server

### Request Body

```
<host><hostname>10.20.237.4</hostname><use-vrf>mgmt-vrf</use-vrf></host>10.20.237.4%2Cmgmt-vrf
```

### Response Body

None

The following is an example of the DELETE operation to remove an LDAP server.

### URI

http://host:80/rest/config/running/ldap-server/host/10.20.237.4%2Cmgmt-vrf

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ldap-server/maprole

Configures, modifies, or retrieves Lightweight Directory Access Protocol (LDAP) server settings for maps.

## Resource URIs

URI	Description
<base_URI>/config/running/ldap-server/maprole	Maps a role to a group.

## Parameters

*ad-group*

AD group belongs to user on the AD Server.

*role*

Specifies the role name.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/ldap-server/maprole

### Request Body

None

### Response Body

```
<maprole y:self="/rest/config/running/ldap-server/maprole">
  <group y:self="/rest/config/running/ldap-server/maprole/group/administrator">
    <ad-group>administrator</ad-group>
    <role>admin</role>
  </group>
</maprole>
```

The following is an example of the POST operation to map a role to a group.

### URI

http://host:80/rest/config/running/ldap-server/maprole

### Request Body

```
<group>
  <ad-group>administrator</ad-group>
  <role>admin</role>
</group>
```

### Response Body

None

The following is an example of the DELETE operation to a maprole configuration.

### URI

http://host:80/rest/config/running/ldap-server/maprole/group

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# link-fault-signaling

Configures, retrieves, and modifies Link Fault Signaling (LFS).

## Resource URIs

URI	Description
<base_URI>/config/running/link-fault-signaling	Configures LFS

GET URIs	Description
<base_URI>/config/running/link-fault-signaling	Retrieves LFS
<base_URI>/config/running/link-fault-signaling/tx	Retrieves TX LFS
<base_URI>/config/running/link-fault-signaling/rx	Retrieves RX LFS

PATCH URIs	Payload	Description
<base_URI>/config/running/link-fault-signaling/rx	<rx>(enumeration)</rx>	Configures RX LFS
<base_URI>/config/running/link-fault-signaling/tx	<tx>(enumeration)</tx>	Configures TX LFS

PUT URIs	Payload	Description
<base_URI>/config/running/link-fault-signaling/tx	<tx>(enumeration)</tx>	Configures TX LFS
<base_URI>/config/running/link-fault-signaling/rx	<rx>(enumeration)</rx>	Configures RX LFS

DELETE URIs
<base_URI>/config/running/link-fault-signaling/tx
<base_URI>/config/running/link-fault-signaling/rx

## Parameters

*rx*  
Specifies RX LFS

*tx*  
Specifies TX LFS

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/link-fault-signaling

### Request Body

None

### Response Body

```
<link-fault-signaling xmlns="urn:brocade.com:mgmt:brocade-lfs" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/link-fault-signaling">
  <rx>on</rx>
  <tx>on</tx>
</link-fault-signaling>
```

The following example uses the PATCH option to configure RX LFS.

### URI

http://host:80/rest/config/running/link-fault-signaling/rx

### Request Body

```
<rx>on</rx>
```

### Response Body

None

The following example uses the DELETE option to remove TX LFS.

### URI

http://host:80/rest/config/running/link-fault-signaling/tx

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

## mac

Configures, modifies, or retrieves MAC access list.

### Resource URIs

URI	Description
<base_URI>/config/running/mac	MAC access list.
<base_URI>/config/running/mac/access-list/standard	Standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{ACL-name}/seq	Sequence number.
<base_URI>/config/running/mac/access-list/extended	Extended IP ACL.
<base_URI>/config/running/mac/access-list/extended/{ACL-name}/seq	Sequence number.

GET URIs	Description
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/srchost	Displays source host for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/src-mac-addr-mask	Displays the source MAC address and the comparison mask for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/count	Displays statistics for the rule for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/log	Displays inbound logging for the rule for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}/copy-sflow	Displays copy sflow status.
<base_URI>/config/{name}/seq/{seq-id}/dst	Displays the destination MAC address for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/dst-mac-addr-mask	Displays the source MAC address and the comparison mask for an extended MAC ACL.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/ethertype	Displays the ethertype for an extended MAC ACL.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/vlan	Displays the VLAN interface to which the ACL is bound.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/pcp	Displays Filters by PCP priority value.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/pcp-force	Displays pcp force status.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/drop-precedence-force	Displays whether trap behavior for control frames is overridden.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/count	Displays statistics for the rule for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/log	Displays inbound logging for the rule for a standard MAC ACL.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/mirror	
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/copy-sflow	Displays copy sflow status.



POST URIs	Payload	Description
<base_URI>/config/running/mac/access-list	<standard><name>{req_val}</name></standard>	Creates a standard MAC access control list (ACL).
<base_URI>/config/running/mac/access-list/standard/{name}	<seq><seq-id>{req_val}</seq-id><action>{enumeration}</action><source>{enumeration}</source></seq>	Configures a standard MAC ACL.
<base_URI>/config/running/mac/access-list	<extended><name>{req_val}</name></extended>	Creates an extended MAC access control list (ACL).
<base_URI>/config/running/mac/access-list/extended/{name}	<seq><seq-id>{req_val}</seq-id><action>{enumeration}</action><source>{enumeration}</source><srchost>{mac-address-type}</srchost><src-mac-addr-mask>{src-dst-mac-address-mask-type}</src-mac-addr-mask><dst>{enumeration}</dst></seq>	Configures an extended MAC ACL.

DELETE URIs
<base_URI>/config/running/mac/access-list/standard/{name}
<base_URI>/config/running/mac/access-list/standard/{name}/seq/{seq-id}
<base_URI>/config/running/mac/access-list/extended/{name}
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}

## Parameters

*name*

Specifies the MAC access list name.

*seq*

Configure the sequence number.

*seq-id*

Specifies the sequence ID.

*action*

Specifies the action to be performed. Supported actions are **deny**, **hard-drop**, and **permit**. Configuring deny drops traffic. Configuring hard-drop force drops traffic. Configuring permit allows traffic

*source*

Specifies the source details.

*dst*

Specifies details on the destination.

*dsthost*

Specifies the destination host.

*ethertype*

Filters extended ACLs traffic based on ethertype.

*vlan*

Specifies the VLAN number.

mac

*log* Enables log.

*count* Displays the count of forwarding entries.

*srchost* Specifies the source host.

## Usage Guidelines

GET, POST, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/mac

### Request Body

None

### Response Body

```
<mac xmlns="urn:brocade.com:mgmt:brocade-mac-access-list" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/mac">
  <access-list y:self="/rest/config/running/mac/access-list">
    <standard y:self="/rest/config/running/mac/access-list/standard/TEST_ACL">
      <name>TEST_ACL</name>
      <seq y:self="/rest/config/running/mac/access-list/standard/TEST_ACL/seq/3">
        <seq-id>3</seq-id>
        <action>hard-drop</action>
        <source>any</source>
      </seq>
      <seq y:self="/rest/config/running/mac/access-list/standard/TEST_ACL/seq/199">
        <seq-id>199</seq-id>
        <action>deny</action>
        <source>any</source>
      </seq>
    </standard>
    <standard y:self="/rest/config/running/mac/access-list/standard/acl2">
      <name>acl2</name>
    </standard>
    <standard y:self="/rest/config/running/mac/access-list/standard/stdmac">
      <name>stdmac</name>
    </standard>
    <extended y:self="/rest/config/running/mac/access-list/extended/MM">
      <name>MM</name>
    </extended>
    <extended y:self="/rest/config/running/mac/access-list/extended/acl12">
      <name>acl12</name>
      <seq y:self="/rest/config/running/mac/access-list/extended/acl12/seq/10">
        <seq-id>10</seq-id>
        <action>permit</action>
        <source>any</source>
        <dst>host</dst>
        <dsthost>0011.2222.2233</dsthost>
        <ethertype>arp</ethertype>
        <vlan>300</vlan>
        <log>true</log>
      </seq>
    </extended>
    <extended y:self="/rest/config/running/mac/access-list/extended/acl4">
      <name>acl4</name>
      <seq y:self="/rest/config/running/mac/access-list/extended/acl4/seq/10">
        <seq-id>10</seq-id>
        <action>deny</action>
        <source>any</source>
        <dst>any</dst>
        <ethertype>arp</ethertype>
        <count>true</count>
      </seq>
    </extended>
    <extended y:self="/rest/config/running/mac/access-list/extended/acl5">
      <name>acl5</name>
```

```

<seq y:self="/rest/config/running/mac/access-list/extended/acl5/seq/10">
  <seq-id>10</seq-id>
  <action>permit</action>
  <source>any</source>
  <dst>any</dst>
  <vlan>100</vlan>
  <log>>true</log>
</seq>
<seq y:self="/rest/config/running/mac/access-list/extended/acl5/seq/20">
  <seq-id>20</seq-id>
  <action>permit</action>
  <source>host</source>
  <srchost>0011.2222.3333</srchost>
  <dst>any</dst>
  <ethertype>arp</ethertype>
  <vlan>100</vlan>
  <count>>true</count>
  <log>>true</log>
</seq>
</extended>
<extended y:self="/rest/config/running/mac/access-list/extended/mac-acl-lldp">
  <name>mac-acl-lldp</name>
  <seq y:self="/rest/config/running/mac/access-list/extended/mac-acl-lldp/seq/10">
    <seq-id>10</seq-id>
    <action>permit</action>
    <source>any</source>
    <dst>host</dst>
    <dsthost>0180.c200.000e</dsthost>
    <count>>true</count>
  </seq>
</extended>
</access-list>
</mac>

```

The following is an example of the POST operation to add a new access list name to the MAC access list.

## URI

http://host:80/rest/config/running/mac/access-list

## Request Body

```

<standard>
  <name>test_API</name>
</standard>

```

## Response Body

None

The following is an example of the DELETE operation to remove an extended access list from the MAC access list.

### *URI*

http://host:80/rest/config/running/mac/access-list/extended/acl2

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# mac-address-table

Configures, modifies, or retrieves MAC forwarding table information.

## Resource URIs

URI	Description
<base_URI>/config/running/mac-address-table	Configures, modifies, or retrieves MAC forwarding table information.

GET URIs	Description
<base_URI>/config/running/mac-address-table/aging-time	Retrieves aging time.
<base_URI>/config/running/mac-address-table/aging-time/conversational	Displays conversational aging time.
<base_URI>/config/running/mac-address-table/aging-time/legacy-time-out	Displays aging time.
<base_URI>/config/running/mac-address-table/learning-mode	Displays conversational Learning Mode status.
<base_URI>/config/running/mac-address-table/mac-move	Displays MAC move configuration.
<base_URI>/config/running/mac-address-table/mac-move/detect	Displays MAC move detect status.
<base_URI>/config/running/mac-address-table/mac-move/limit	Displays MAC move detect limit.

PUT URIs	Payload	Description
<base_URI>/config/running/mac-address-table/aging-time/conversational	<conversational>{uint32}</conversational>	Sets conversational aging time in seconds (default = 300)
<base_URI>/config/running/mac-address-table/aging-time/legacy-time-out	<legacy-time-out>{uint32}</legacy-time-out>	Sets aging time in seconds (default = 300)
<base_URI>/config/running/mac-address-table/learning-mode	<learning-mode>{enumeration}</learning-mode>	Enables Conversational Learning Mode.
<base_URI>/config/running/mac-address-table/mac-move/detect	<detect>true</detect>	Enables MAC move detect.
<base_URI>/config/running/mac-address-table/mac-move/limit	<limit>{uint32}</limit>	Sets MAC move detect limit (default = 20)

PATCH URIs	Payload	Description
<base_URI>/config/running/mac-address-table/aging-time	<aging-time><conversational>{uint32}</conversational></aging-time>	Sets Conversational Aging time in seconds (default = 300).
<base_URI>/config/running/mac-address-table/aging-time	<aging-time><legacy-time-out>{uint32}</legacy-time-out></aging-time>	Sets Aging time in seconds (default = 300).
<base_URI>/config/running/mac-address-table/mac-move	<mac-move><detect>true</detect></mac-move>	Enables MAC move detect.
<base_URI>/config/running/mac-address-table/mac-move	<mac-move><limit>{uint32}</limit></mac-move>	Sets MAC move detect limit (default = 20).

DELETE URIs
<base_URI>/config/running/mac-address-table/aging-time
<base_URI>/config/running/mac-address-table/aging-time/conversational

DELETE URIs
<base_URI>/config/running/mac-address-table/aging-time/legacy-time-out
<base_URI>/config/running/mac-address-table/learning-mode
<base_URI>/config/running/mac-address-table/mac-move/detect
<base_URI>/config/running/mac-address-table/mac-move/limit

## Parameters

### *aging-time*

Aging time in seconds (default = 300)

### *conversational*

Conversational Aging time in seconds (default = 300)

### *legacy-time-out*

Aging time in seconds (default = 300)

### *learning-mode*

Conversational Learning Mode

### *detect*

Enables MAC move detect. Boolean variable.

### *limit*

MAC move detect limit (default = 20)

## Usage Guidelines

GET, POST, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/mac-address-table/static/static-mac/

### Request Body

None

### Response Body

```
<static-mac xmlns="urn:brocade.com:mgmt:brocade-mac-address-table" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/mac-address-table/static/static-mac/1000.2000.0001%2Cforward%2Cethernet%2C
%220/10%22%2Cvlan%2C1">
  <mac-address>1000.2000.0001</mac-address>
  <forward>forward</forward>
  <interface-type>ethernet</interface-type>
  <interface-name>0/10</interface-name>
  <vlan>vlan</vlan>
  <vlanid>1</vlanid>
</static-mac>
```

The following example uses the POST option to configure a static MAC.

### URI

http://host:80/rest/config/running/mac-address-table/static/

### Request Body

```
<static-mac><mac-address>1000.2000.0001</mac-address><forward>forward</forward><interface-
type>ethernet</interface-type><interface-name>0/10</interface-name><vlan>vlan</vlan><vlanid>1</vlanid></
static-mac>
```

### Response Body

None



The following example uses the DELETE option to remove the static MAC configuration.

### *URI*

http://host:80/rest/config/running/mac-address-table/static/static-mac/1000.2000.0001%2Cforward%2Cethernet%2C%220/10%22%2Cvlan%2C1

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# monitor/session

Configures, modifies, or retrieves complete list of configured mirroring sessions.

## Resource URIs

URI	Description
<base_URI>/config/running/monitor/session	Configures complete list of configured mirroring sessions.

GET URIs	Description
<base_URI>/config/running/monitor	Retrieves complete list of configured mirroring sessions.
<base_URI>/config/running/monitor/session/{session-number}	Retrieves mirroring information of particular session.
<base_URI>/config/running/monitor/session/{session-number}/description	Retrieves description of particular mirroring session.
<base_URI>/config/running/monitor/session/{session-number}/direction	Retrieves direction information of particular session.

POST URIs	Payload	Description
<base_URI>/config/running/monitor	<session><session-number>{session-type}</session-number></session>	Configures mirroring session.

PATCH URIs	Payload	Description
<base_URI>/config/running/monitor/session/{session-number}	<session><description>{string}</description></session>	Adds description information to an existing mirroring session.
<base_URI>/config/running/monitor/session/{session-number}	<session><source>source</source><src-ethernet-val>{slot/port}</src-ethernet-val><src-ethernet>ethernet</src-ethernet><destination>destination</destination><dest-ethernet>ethernet</dest-ethernet><dest-ethernet-val>{slot/port}</dest-ethernet-val><direction>{rx tx both}</direction></session>	Adds source interface, destination interface, and direction information to an existing mirroring session created using POST command.
<base_URI>/config/running/monitor/session/{session-number}	<session><source>source</source><src-ethernet-val>{slot/port}</src-ethernet-val><src-ethernet>ethernet</src-ethernet><destination>destination</destination><dest-ethernet>ethernet</dest-ethernet><dest-port-channel-val>{port-channel number}</dest-port-channel-val><direction>{rx tx both}</direction></session>	Adds source interface, destination port-channel number, and direction information to an existing mirroring session created using POST command.

PUT URIs	Payload	Description
<base_URI>/config/running/monitor/session/{session-number}/description	<description>{string}</description>	Adds description information to an existing mirroring session.

DELETE URIs
<base_URI>/config/running/monitor/session/{session-number}

## Usage Guidelines

### Examples

The following example uses the GET option to retrieve the configuration details.

#### *URI*

http://host:80/rest/config/running/monitor/session/3

#### *Request Body*

None

#### *Response Body*

```
<session xmlns="urn:brocade.com:mgmt:brocade-span" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/monitor/session/3">
  <session-number>3</session-number>
  <source>source</source>
  <src-ethernet>ethernet</src-ethernet>
  <src-ethernet-val>1/3</src-ethernet-val>
  <destination>destination</destination>
  <dest-ethernet>ethernet</dest-ethernet>
  <dest-ethernet-val>1/4</dest-ethernet-val>
  <direction>tx</direction>
</session>
```

The following example uses the POST option to configure mirroring session.

#### *URI*

http://host:80/rest/config/running/monitor

#### *Request Body*

```
<session><session-number>{session-type}</session-number></session>
```

#### *Response Body*

None

The following example uses the DELETE option to remove mirror session.

**URI**

http://host:80/rest/config/running/monitor/session/3

**Request Body**

None

**Response Body**

None

## History

Release version	History
17s.1.00	This API call was introduced.

# ntp

Configures, modifies, or retrieves Network Time Protocol (NTP) commands.

## Resource URIs

URI	Description
<base_URI>/config/running/ntp	NTP commands.

GET URIs	Description
<base_URI>/config/running/ntp	Displays NTP configuration.
<base_URI>/config/running/ntp/authentication-key	Displays authentication key.
<base_URI>/config/running/ntp/server	Displays NTP server information.

POST URIs	Payload	Description
<base_URI>/config/running/ntp	<server><ip>[ip-address]</ip><use-vrf>{vrf-name}</use-vrf></server>	Configures NTP server.
<base_URI>/config/running/ntp	<authentication-key><keyid>[unit32]</keyid><md5>{teesting}</md5></authentication-key>	Configures authentication key and MD5 message-digest algorithm.
<base_URI>/config/running/ntp	<server><ip>[ip-address]</ip><use-vrf>{vrf-name}</use-vrf><key>[unit32]</key></server>	Configures NTP server key.

DELETE URIs
<base_URI>/config/running/ntp
<base_URI>/config/running/ntp/server/{ip}/use-vrf
<base_URI>/config/running/ntp/server/{ip}/user-vrf/{vrf-name}/{keyid}

## Parameters

### *authentication-key*

Configures authentication key parameters.

### *server*

Configures NTP server parameters.

### *ip*

Configures the source ip to be used for NTP.

### *keyid*

Specifies authentication key ID. Valid range is from 0 to 65535.

### *use-vrf*

Specifies the VRF to be used.

### *key*

Key from the key list to be associated with the specified server.

*md5*

Specifies a string for the MD5 message-digest algorithm. The string can be a maximum of 15 ASCII characters.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/ntp

### *Request Body*

None

### *Response Body*

```
<ntp xmlns="urn:brocade.com:mgmt:brocade-ntp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ntp">
  <server y:self="/rest/config/running/ntp/server/10.1.1.2%2Cmgmt-vrf">
    <ip>10.1.1.2</ip>
    <use-vrf>mgmt-vrf</use-vrf>
  </server>
</ntp>
```

The following example uses the POST option to configure authentication-key.

### *URI*

http://host:80/rest/config/running/ntp

### *Request Body*

```
<authentication-key>
  <keyid>50</keyid>
  <md5>{teesting}</md5>
</authentication-key>
```

### *Response Body*

None

The following example uses the DELETE option to remove NTP configuration.

**URI**

http://host:80/rest/config/running/ntp

**Request Body**

None

**Response Body**

None

## History

Release version	History
17s.1.00	This API call was introduced.

# password-attributes

Configures, modifies, or retrieves user password attributes.

## Resource URIs

URI	Description
<base_URI>/config/running/password-attributes	System-wide user password attributes.
<base_URI>/config/running/password-attributes/character-restriction	Restriction on various types of characters. Refer to password-attributes/character-restriction for information.

## Parameters

### *max-lockout-duration*

Specifies the maximum number of minutes after which the user account is unlocked. The value can range from 0 through 99999. The default value is 0.

### *admin-lockout*

Enables lockout for admin role.

### *min-length*

Specifies the minimum length of the password. The value can range from 8 through 32 characters. The default length of the password is 8 characters.

### *max-retry*

Specifies the maximum number of login retries before which the user account is locked. The value can range from 0 to 16. The default number of login retries is 0.

### *character-restriction*

Configures restriction on various types of characters.

## Usage Guidelines

GET, PATCH, POST, PUT, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/password-attributes

### Request Body

None

### Response Body

```
<password-attributes xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/password-attributes">
  <max-lockout-duration>12</max-lockout-duration>
  <min-length>9</min-length>
  <max-retry>3</max-retry>
  <character-restriction y:self="/rest/config/running/password-attributes/character-restriction"/>
  <admin-lockout>true</admin-lockout>
</password-attributes>
```

The following is an example of the PUT operation to configure the password attributes.

### URI

http://host:80/rest/config/running/password-attributes

### Request Body

```
<password-attributes>
  <max-lockout-duration>10</max-lockout-duration>
  <min-length>11</min-length>
  <max-retry>5</max-retry>
</password-attributes>
```

### Response Body

None

The following is an example of the DELETE operation to remove the maximum retry value.

### URI

http://host:80/rest/config/running/password-attributes/max-retry

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# password-attributes/character-restriction

Configures, modifies, or retrieves character restriction configurations.

## Resource URIs

URI	Description
<base_URI>/config/running/password-attributes/character-restriction	Restriction on various types of characters.

## Parameters

### *lower*

Specifies the minimum number of lower-case alphabets. The value can range from 0 through 32. The default value is 8 number of lower-case alphabets.

### *numeric*

Specifies the minimum number of numeric characters. The value can range from 0 through 32. The default value is 0.

### *special-char*

Specifies the minimum number of special characters. The value can range from 0 through 32 characters. The default value is 0 characters.

### *upper*

Sets the number of uppercase alphabetic characters that must occur in the password.

## Usage Guidelines

GET, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/password-attributes/character-restriction

### *Request Body*

None

### *Response Body*

```
<character-restriction y:self="/rest/config/running/password-attributes/character-restriction">
  <upper>1</upper>
  <lower>1</lower>
  <numeric>1</numeric>
  <special-char>1</special-char>
</character-restriction>
```

The following is an example of the PATCH operation to modify the character restriction parameters.

### URI

http://host:80/rest/config/running/password-attributes

### Request Body

```
<password-attributes>
  <character-restriction>
    <upper>2</upper>
    <lower>2</lower>
    <numeric>2</numeric>
    <special-char>1</special-char>
  </character-restriction>
</password-attributes>
```

### Response Body

None

The following is an example of the DELETE operation to change to the default setting.

### URI

http://host:80/rest/config/running/password-attributes

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# police-remark-profile

Configures police remark profile.

## Resource URIs

URI	Description
<base_URI>/config/running/police-remark-profile/default	Configures police remark profile.

GET URIs	Description
<base_URI>/config/running/police-remark-profile/	Displays the name of the profile.
<base_URI>/config/running/police-remark-profile/default	Displays police remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}	Displays police remark profile actions.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/set	Displays default values for the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/set/cos	Displays default CoS.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/set/traffic-class	Displays default Traffic-Class.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/set/dscp	Displays default DSCP.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	Displays information about QoS maps applied the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/cos-mutation	Displays information about CoS-Mutation map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/cos-traffic-class	Displays information about maps of type CoS-Traffic Class.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/cos-dscp	Apply CoS-to-DSCP map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/traffic-class-mutation	Apply Traffic-Class-Mutation map
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/traffic-class-cos	Apply Traffic-Class-to-CoS map
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/traffic-class-dscp	Apply Traffic-Class-to-DSCP map
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/dscp-mutation	Apply DSCP-Mutation map
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/dscp-traffic-class	Apply DSCP-to-Traffic-Class map
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/dscp-cos	Apply DSCP-to-CoS map

POST URIs	Payload	Description
<base_URI>/config/running/	<police-remark-profile><profile-name>[profile-name-type]</profile-name></police-remark-profile>	Configure police remark profile.

POST URIs	Payload	Description
<base_URI>/config/running/police-remark-profile/default	<action><classification-type>{enumeration}</classification-type><action-type>{enumeration}</action-type></action>	Configure police remark profile actions.

PUT URIs	Payload	Description
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/set/cos	<cos>{qos-mls:cos-id-type}</cos>	Sets default CoS.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/set/traffic-class	<traffic-class>{qos-mls:traffic-class-id-type}</traffic-class>	Sets default Traffic-Class.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/set/dscp	<dscp>{qos-mls:dscp-id-type}</dscp>	Sets default DSCP.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/cos-mutation	<cos-mutation>{map-name-type}</cos-mutation>	Applies CoS-Mutation map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/cos-traffic-class	<cos-traffic-class>{map-name-type}</cos-traffic-class>	Applies CoS-to-Traffic-Class map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/cos-dscp	<cos-dscp>{map-name-type}</cos-dscp>	Applies CoS-to-DSCP map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/traffic-class-mutation	<traffic-class-mutation>{map-name-type}</traffic-class-mutation>	Applies Traffic-Class-Mutation map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/traffic-class-cos	<traffic-class-cos>{map-name-type}</traffic-class-cos>	Applies Traffic-Class-to-CoS map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/traffic-class-dscp	<traffic-class-dscp>{map-name-type}</traffic-class-dscp>	Applies Traffic-Class-to-DSCP map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/dscp-mutation	<dscp-mutation>{map-name-type}</dscp-mutation>	Applies DSCP-Mutation map.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/dscp-traffic-class	<dscp-traffic-class>{map-name-type}</dscp-traffic-class>	Applies DSCP-to-Traffic-Class map
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/map/dscp-cos	<dscp-cos>{map-name-type}</dscp-cos>	Applies DSCP-to-CoS map.

PATCH URIs	Payload	Description
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/set	<set><cos>{qos-mls:cos-id-type}</cos></set>	Sets default CoS .
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/set	<set><traffic-class>{qos-mls:traffic-class-id-type}</traffic-class></set>	Sets default Traffic-Class.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type}, {action-type}/set	<set><dscp>{qos-mls:dscp-id-type}</dscp></set>	Sets default DSCP.

PATCH URIs	Payload	Description
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><cos-mutation>{map-name-type}</cos-mutation></map>	Applies CoS-Mutation map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><cos-traffic-class>{map-name-type}</cos-traffic-class></map>	Applies CoS-to-Traffic-Class map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><cos-dscp>{map-name-type}</cos-dscp></map>	Applies CoS-to-DSCP map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><traffic-class-mutation>{map-name-type}</traffic-class-mutation></map>	Applies Traffic-Class Mutation map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><traffic-class-cos>{map-name-type}</traffic-class-cos></map>	Applies Traffic-Class-to-CoS map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><traffic-class-dscp>{map-name-type}</traffic-class-dscp></map>	Applies Traffic-Class-to-DSCP map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><dscp-mutation>{map-name-type}</dscp-mutation></map>	Applies DSCP-Mutation map to the remark profile.
police-remark-profile/default/action/{classification-type},{action-type}/map	<map><dscp-traffic-class>{map-name-type}</dscp-traffic-class></map>	Applies DSCP-to-Traffic-Class map to the remark profile.
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map	<map><dscp-cos>{map-name-type}</dscp-cos></map>	Applies DSCP-to-CoS map to the remark profile.

DELETE URIs
<base_URI>/config/running/police-remark-profile/default
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/set/traffic-class
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/set/dscp
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/cos-mutation
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/cos-traffic-class
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/cos-dscp
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/traffic-class-mutation
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/traffic-class-cos
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/traffic-class-dscp
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/dscp-mutation
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/dscp-traffic-class
<base_URI>/config/running/police-remark-profile/default/action/{classification-type},{action-type}/map/dscp-cos

## Parameters

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/police-remark-profile/default/action/color-and-cos%2Cconform/map

### Request Body

None

### Response Body

```
<map xmlns="urn:brocade.com:mgmt:brocade-qos-mqc" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/police-remark-profile/default/action/color-and-cos%2Cconform/map">
  <cos-mutation>cos-to-cos-1</cos-mutation>
  <cos-traffic-class>cos-to-tc-1</cos-traffic-class>
  <cos-dscp>cos-dscp-1</cos-dscp>
</map>
```

The following example uses the PUT option to configure the map.

### URI

http://host:80/rest/config/running/police-remark-profile/default/action/color-and-cos%2Cconform/map/cos-mutation

### Request Body

```
<cos-mutation>cos-to-cos-1</cos-mutation>
```

### Response Body

None



The following is an example of the DELETE operation to remove a configuration.

### *URI*

http://host:80/rest/config/running/police-remark-profile/default/action/color-and-cos%2Cconform/map/cos-mutation

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/lldp

Configures, modifies, or retrieves Link Layer Discovery Protocol (LLDP) configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/protocol	Protocol configuration.
<base_URI>/config/running/protocol/lldp	Link Layer Discovery Protocol (LLDP).

GET URIs	Description
<base_URI>/config/running/protocol/lldp	Protocol configuration.
<base_URI>/config/running/protocol/lldp/description	Retrieves the user description.
<base_URI>/config/running/protocol/lldp/hello	Retrieves hello interval.
<base_URI>/config/running/protocol/lldp/mode	Retrieves LLDP Transmit Only Mode information.
<base_URI>/config/running/protocol/lldp/multiplier	Retrieves multiplier details.
<base_URI>/config/running/protocol/lldp/advertise/dot1-tlv	Retrieves advertise IEEE 802.1 Organizationally Specific TLV configuration details.
<base_URI>/config/running/protocol/lldp/advertise/dot3-tlv	Retrieves advertise IEEE 802.3 Organizationally Specific TLV configuration details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/management-address	Retrieves management address TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/port-description	Retrieves port description TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-capabilities	Retrieves system capabilities TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-description	Retrieves system description TLV details.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-name	Retrieves system name TLV details.
<base_URI>/config/running/protocol/lldp/system-name	Retrieves system name.
<base_URI>/config/running/protocol/lldp/system-description	Retrieves system description.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/description	Retrieves port profile description.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/hello	Retrieves port profile hello interval configuration details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/mode	Retrieves port profile mode.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/multiplier	Retrieves port profile multiplier.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot1-tlv	Retrieves port profile advertisement TLV details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot3-tlv	Retrieves port profile advertisement TLV details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/management-address	Retrieves advertise IEEE 802.1 Organizationally Specific TLV configuration details.

GET URIs	Description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/port-description	Retrieves advertise IEEE 802.3 Organizationally Specific TLV configuration details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-capabilities	Retrieves system capabilities TLV details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-description	Retrieves system description TLV details.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-name	Retrieves system name TLV details.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/lldp	<profile><profile-name>(profile-name-string)</profile-name></profile>	Configures LLDP profile.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/lldp	<lldp><description>(string)</description></lldp>	Configures LLDP description.
<base_URI>/config/running/protocol/lldp	<lldp><hello>(unit32)</hello></lldp>	Configures LLDP hello interval.
<base_URI>/config/running/protocol/lldp	<lldp><mode>(string)</mode></lldp>	Configures LLDP mode.
<base_URI>/config/running/protocol/lldp	<lldp><multiplier>(unit32)</multiplier></lldp>	Configures LLDP multiplier.
<base_URI>/config/running/protocol/lldp/advertise	<advertise><dot1-tlv>(string)</dot1-tlv></advertise>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise	<advertise><dot3-tlv>(string)</dot3-tlv></advertise>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><management-address>(string)</management-address></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><port-description>(string)</port-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><system-capabilities>(string)</system-capabilities></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><system-description>(string)</system-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv	<optional-tlv><system-name>(string)</system-name></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp	<lldp><system-name>(string)</system-name></lldp>	Configure LLDP system name.
<base_URI>/config/running/protocol/lldp	<lldp><system-description>(string)</system-description></lldp>	Configures LLDP system description.
<base_URI>/config/running/protocol/lldp	<lldp><disable>(string)</disable></lldp>	Disables LLDP.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)	<profile><description>(string)</description></profile>	Configures LLDP profile description.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)	<profile><hello>(unit32)</hello></profile>	Configures LLDP profile hello interval.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)	<profile><multiplier>(nit32)</multiplier></profile>	Configures LLDP profile multiplier.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise	<advertise><dot1-tlv>(string)</dot1-tlv></advertise>	Configures LLDP profile advertisement.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise	<advertise><dot3-tlv>(string)</dot3-tlv></advertise>	Configures LLDP profile advertisement.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><management-address>(string)</management-address></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><port-description>(string)</port-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><system-capabilities>(string)</system-capabilities></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><system-description>(string)</system-description></optional-tlv>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv	<optional-tlv><system-name>(string)</system-name></optional-tlv>	Configures LLDP optional TLV parameters.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/description	<description>(string)</description>	Configures LLDP description.
<base_URI>/config/running/protocol/lldp/hello	<hello>(unit32)</hello>	Configures LLD hello interval.
<base_URI>/config/running/protocol/lldp/mode	<mode>(unit32)</mode>	Configures LLDP mode.
<base_URI>/config/running/protocol/lldp/multiplier	<multiplier>(unit32)</multiplier>	Configures LLDP multiplier.
<base_URI>/config/running/protocol/lldp/advertise/dot1-tlv	<dot1-tlv>(string)</dot1-tlv>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise/dot3-tlv	<dot3-tlv>(string)</dot3-tlv>	Configures LLDP advertisement.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/management-address	<management-address>(string)</management-address>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/port-description	<port-description>(string)</port-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-capabilities	<system-capabilities>(string)</system-capabilities>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-description	<system-description>(string)</system-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-name	<system-name>(string)</system-name>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/system-name	<system-name>(string)</system-name>	Configure LLDP system name.
<base_URI>/config/running/protocol/lldp/system-description	<system-description>(string)</system-description>	Configures LLDP system description.
<base_URI>/config/running/protocol/lldp/disable	<disable>(string)</disable>	Disables LLDP.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/description	<description>(string)</description>	Configures LLDP profile description.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/hello	<hello>(unit32)</hello>	Configures LLDP profile hello interval.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/mode	<mode>(unit32)</mode>	Configures LLDP profile mode.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/multiplier	<multiplier>(unit32)</multiplier>	Configures LLDP profile multiplier.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot1-tlv	<dot1-tlv>(string)</dot1-tlv>	Configures LLDP profile advertisement.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot3-tlv	<dot3-tlv>(string)</dot3-tlv>	Configures LLDP profile advertisement.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/management-address	<management-address>(string)</management-address>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/port-description	<port-description>(string)</port-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-capabilities	<system-capabilities>(string)</system-capabilities>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-description	<system-description>(string)</system-description>	Configures LLDP optional TLV parameters.
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-name	<system-name>(string)</system-name>	Configures LLDP optional TLV parameters.

DELETE URIs
<base_URI>/config/running/protocol/lldp/description
<base_URI>/config/running/protocol/lldp/hello
<base_URI>/config/running/protocol/lldp/mode
<base_URI>/config/running/protocol/lldp/multiplier
<base_URI>/config/running/protocol/lldp/advertise/dot1-tlv
<base_URI>/config/running/protocol/lldp/advertise/dot3-tlv
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/management-address
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/port-description
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-capabilities
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-description
<base_URI>/config/running/protocol/lldp/advertise/optional-tlv/system-name
<base_URI>/config/running/protocol/lldp/system-name
<base_URI>/config/running/protocol/lldp/system-description
<base_URI>/config/running/protocol/lldp/disable
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/hello
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/mode
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/multiplier

DELETE URIs
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot1-tlv
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/dot3-tlv
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/management-address
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/port-description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-capabilities
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-description
<base_URI>/config/running/protocol/lldp/profile/(profile-name-string)/advertise/optional-tlv/system-name

## Parameters

### *mode*

Specifies the LLDP mode. Supported modes are **rx** and **tx**. Configuring **rx** enables LLDP receive only mode. Configuring **tx** enables LLDP transmit only mode.

### *description*

Specifies user description for LLDP.

### *advertise*

Sets the Advertise TLV configuration.

### *system-name*

Specifies system name.

### *system-description*

Specifies system description.

### *profile-name*

Specifies the profile name.

### *dot1-tlv*

Enables IEEE 802.1 organizationally specific TLV.

### *dot3-tlv*

Enables IEEE 802.3 organizationally specific TLV.

### *optional-tlv*

Advertises the optional Type, Length, and Values (TLV) values.

### *description*

Configures the user description.

### *profile*

Configures the LLDP profile name.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/protocol/lldp

### Request Body

None

### Response Body

```
<lldp xmlns="urn:brocade.com:mgmt:brocade-lldp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol/lldp">
  <description>rest testing</description>
  <hello>4</hello>
  <mode>tx</mode>
  <multiplier>10</multiplier>
  <advertise y:self="/rest/config/running/protocol/lldp/advertise">
    <dot1-tlv>true</dot1-tlv>
    <dot3-tlv>true</dot3-tlv>
    <optional-tlv y:self="/rest/config/running/protocol/lldp/advertise/optional-tlv">
      <management-address>true</management-address>
      <system-capabilities>true</system-capabilities>
      <system-description>true</system-description>
    </optional-tlv>
  </advertise>
  <system-description>Brocade BR-SLX9850-4 Router</system-description>
</lldp>
```

The following example uses the POST option to configure LLDP profile.

### URI

http://host:80/rest/config/running/protocol/lldp

### Request Body

```
<profile>
  <profile-name>profile1</profile-name>
</profile>
```

### Response Body

None

The following example uses the DELETE option to remove LLDP description.

### *URI*

http://host:80/rest/config/running/protocol/lldp/description

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.



# protocol/ptp

Configures precision time protocol (PTP).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/ptp	Configures precision time protocol (PTP).

GET URIs	Description
<base_URI>/config/running/protocol/ptp	Retrieves PTP configuration.

POST URIs	Payload	Description
<base_URI>/config/running/protocol	<ptp><enable>true</enable><domain>{uint32}</domain><priority1>{uint32}</priority1><priority2>{uint32}</priority2><source-ip>{ip-address}</source-ip></ptp>	Configures PTP.
<base_URI>/config/running/protocol/ptp	<enable>true</enable>	Enables PTP.
<base_URI>/config/running/protocol/ptp	<source-ip>{ip-address}</source-ip>	Sets source IP address for PTP packets.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/ptp	<domain>{uint32}</domain>	Sets clock domain.
<base_URI>/config/running/protocol/ptp	<priority1>{uint32}</priority1>	Sets clock priority 1 for BMCA.
<base_URI>/config/running/protocol/ptp	<priority2>{uint32}</priority2>	Sets clock priority 2 for BMCA.

DELETE URIs
<base_URI>/config/running/protocol/ptp
<base_URI>/config/running/protocol/ptp/enable
<base_URI>/config/running/protocol/ptp/source-ip
<base_URI>/config/running/protocol/ptp/domain
<base_URI>/config/running/protocol/ptp/priority1
<base_URI>/config/running/protocol/ptp/priority2

## Parameters

*domain*

Specifies the clock domain. (integer)

*enable*

Represents whether PTP is enabled. (Boolean)

*source-ip*

Source IP address for PTP packets. (A.B.C.D)

- priority1*  
Clock priority 1 for BMCA. (integer)
- priority2*  
Clock priority 2 for BMCA. (integer)

## Usage Guidelines

GET, POST, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/protocol/ptp

### Request Body

None

### Response Body

```
<ptp xmlns="urn:brocade.com:mgmt:brocade-ptp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol/ptp">
  <enable>true</enable>
  <domain>127</domain>
  <priority1>40</priority1>
  <priority2>40</priority2>
  <source-ip>2.2.2.2</source-ip>
</ptp>
```

The following is an example of the POST operation to create a PTP configuration.

### URI

http://host:80/rest/config/running/protocol

### Request Body

```
"<ptp><enable>true</enable><domain>127</domain><priority1>40</priority1><priority2>40</priority2><source-ip>2.2.2.2</source-ip></ptp>
```

### Response Body

None

The following is an example of the DELETE operation to remove a PTP configuration.

### *URI*

http://host:80/rest/config/running/protocol/ptp

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/spanning-tree/mstp

Configures Multiple Spanning Tree Protocol (MSTP).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/mstp	Configures MSTP.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree	Retrieves spanning tree configurations.
<base_URI>/config/running/protocol/spanning-tree/mstp	Retrieves MSTP configuration information.
<base_URI>/config/running/protocol/spanning-tree/mstp/instance/(instance-id)	Retrieves MSTP configuration information for a particular instance.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp	<instance><id>(unit32)</id><vlan>(unit32)</vlan></instance>	Configures MSTP instance.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp/instance/(instance-id)/priority	<priority>(unit32)</priority>	Configures MSTP priority.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp/description	<description>(string)</description>	Configures MSTP description.
<base_URI>/config/running/protocol/spanning-tree/mstp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures MSTP bridge priority.
<base_URI>/config/running/protocol/spanning-tree/mstp/cisco-interoperability	<cisco-interoperability>(enumeration)</cisco-interoperability>	Enable MSTP cisco interoperability.
<base_URI>/config/running/protocol/spanning-tree/mstp/error-disable-timeout/enable	<enable></enable>	Enables MSTP error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/mstp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures MSTP forward delay.
<base_URI>/config/running/protocol/spanning-tree/mstp/hello-time	<hello-time>(unit32)</hello-time>	Configures MSTP hello time.
<base_URI>/config/running/protocol/spanning-tree/mstp/max-age	<max-age>(unit32)</max-age>	Configures MSTP max age.
<base_URI>/config/running/protocol/spanning-tree	max-hops>(unit32)</max-hops>	Configures max hops.
<base_URI>/config/running/protocol/spanning-tree/mstp/port-channel/path-cost	<path-cost>(string)</path-cost>	Configures MSTP port channel path cost.
<base_URI>/config/running/protocol/spanning-tree/mstp/region	<region>(string)</region>	Configures MSTP string.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/mstp/revision	<revision>(unit32)</revision>	Configures MSTP revision.
<base_URI>/config/running/protocol/spanning-tree/mstp/shutdown	<shutdown></shutdown>	Disable MSTP.
<base_URI>/config/running/protocol/spanning-tree/mstp/transmit-holdcount	<transmit-holdcount>(uni32)</transmit-holdcount>	Configures MSTP trasmit holdcount.
<base_URI>/config/running/protocol/spanning-tree/mstp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures MSTP error disable timeout interval.

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/mstp/description
<base_URI>/config/running/protocol/spanning-tree/mstp/bridge-priority
<base_URI>/config/running/protocol/spanning-tree/mstp/cisco-interoperability
<base_URI>/config/running/protocol/spanning-tree/mstp/error-disable-timeout/enable
<base_URI>/config/running/protocol/spanning-tree/mstp/forward-delay
<base_URI>/config/running/protocol/spanning-tree/mstp/hello-time
<base_URI>/config/running/protocol/spanning-tree/mstp/max-age
<base_URI>/config/running/protocol/spanning-tree
<base_URI>/config/running/protocol/spanning-tree/mstp/port-channel/path-cost
<base_URI>/config/running/protocol/spanning-tree/mstp/region
<base_URI>/config/running/protocol/spanning-tree/mstp/revision
<base_URI>/config/running/protocol/spanning-tree/mstp/shutdown
<base_URI>/config/running/protocol/spanning-tree/mstp/transmit-holdcount
<base_URI>/config/running/protocol/spanning-tree/mstp/error-disable-timeout/interval

## Parameters

### *description*

Specifies description.

### *bridge-priority*

Specifies bridge priority.

### *interval*

Specifies the interval.

### *forward-delay*

Specifies the forward delay.

### *max-age*

Specifies max age.

### *path-cost*

Specifies the path cost.

### *hello-time*

Specifies the hello time.

*transmit-holdcount*

Specifies transmit hold count.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

`http://host:80/rest/config/running/protocol/spanning-tree/mstp`

### Request Body

None

### Response Body

```
<spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/protocol/spanning-tree">\r
  <mstp y:self="/rest/config/running/protocol/spanning-tree/mstp">\r
    <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/mstp/error-disable-
timeout">\r
      </error-disable-timeout>\r
    <port-channel y:self="/rest/config/running/protocol/spanning-tree/mstp/port-channel">\r
      </port-channel>\r
    <instance y:self="/rest/config/running/protocol/spanning-tree/mstp/instance/1">\r
      <id>1</id>\r
      <vlan>5-10</vlan>\r
    </instance>\r
  </mstp>\r
</spanning-tree>\r
```

The following example uses the POST option to configure MSTP instance.

### URI

`http://host:80/rest/config/running/protocol/spanning-tree/mstp`

### Request Body

```
<instance>
  <id>2</id>
  <vlan>4</vlan>
</instance>
```

### Response Body

None

The following example uses the DELETE option to remove MSTP description.

### *URI*

http://host:80/rest/config/running/protocol/spanning-tree/mstp/description

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/spanning-tree/pvst

Configures Per-VLAN Spanning Tree (PVST).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/pvst	Configures PVST.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree/pvst	Retrieves PVST configuration information.
<base_URI>/config/running/protocol/spanning-tree/pvst/description	Retrieves PVST description.
<base_URI>/config/running/protocol/spanning-tree/pvst/bridge-priority	Retrieves bridge priority for the common instance
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/enable	Retrieves error disable timeout information.
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/interval	Retrieves error disable timeout interval details.
<base_URI>/config/running/protocol/spanning-tree/pvst/forward-delay	Retrieves forward delay information.
<base_URI>/config/running/protocol/spanning-tree/pvst/max-age	Retrieves max age information.
<base_URI>/config/running/protocol/spanning-tree/pvst/port-channel/path-cost	Retrieves path cost.
<base_URI>/config/running/protocol/spanning-tree/pvst/shutdown	Disables PVST.
<base_URI>/config/running/protocol/spanning-tree/pvst/hello-time	Retrieves hello time.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/forward-delay	Retrieves forward delay information for a particular VLAN.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/max-age	Retrieves max age information for a particular VLAN.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/hello-time	Retrieves hello time information for a particular VLAN.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree	<pvst />	Configures PVST.
<base_URI>/config/running/protocol/spanning-tree/pvst	<vlan><id>(req_val)</id><priority>(uint32)</priority></vlan>	Configures PVST priority.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/pvst/description	<description />	Configures PVST description.
<base_URI>/config/running/protocol/spanning-tree/pvst/bridge-priority	<bridge-priority />	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/enable	<enable />	Enables error disable timeout.



PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/interval	<interval />	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/pvst/forward-delay	<forward-delay />	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/pvst/max-age	<max-age />	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/pvst/port-channel/path-cost	<path-cost />	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/pvst/shutdown	<shutdown />	Disables PVST.
<base_URI>/config/running/protocol/spanning-tree/pvst/hello-time	<hello-time />	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)	<vlan><priority>(uint32)</priority></vlan>	Configures priority for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)	<vlan><forward-delay>(uint32)</forward-delay></vlan>	Configures forward delay for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)	<vlan><max-age>(uint32)</max-age></vlan>	Configures max age for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)	<vlan><hello-time>(uint32)</hello-time></vlan>	Configures hello time for a VLAN.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/pvst/description	<description />	Configures PVST description.
<base_URI>/config/running/protocol/spanning-tree/pvst/bridge-priority	<bridge-priority />	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/enable	<enable />	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/interval	<interval />	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/pvst/forward-delay	<forward-delay />	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/pvst/max-age	<max-age />	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/pvst/port-channel/path-cost	<path-cost />	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/pvst/shutdown	<shutdown />	Disables PVST.
<base_URI>/config/running/protocol/spanning-tree/pvst/hello-time	<hello-time />	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/forward-delay	<forward-delay/>	Configures forward delay for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/max-age	<<max-age/>	Configures max age for a VLAN.

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/pvst
<base_URI>/config/running/protocol/spanning-tree/pvst/description
<base_URI>/config/running/protocol/spanning-tree/pvst/bridge-priority
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/enable
<base_URI>/config/running/protocol/spanning-tree/pvst/error-disable-timeout/interval
<base_URI>/config/running/protocol/spanning-tree/pvst/forward-delay
<base_URI>/config/running/protocol/spanning-tree/pvst/max-age
<base_URI>/config/running/protocol/spanning-tree/pvst/port-channel/path-cost
<base_URI>/config/running/protocol/spanning-tree/pvst/shutdown
<base_URI>/config/running/protocol/spanning-tree/pvst/hello-time
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/forward-delay
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/max-age
<base_URI>/config/running/protocol/spanning-tree/pvst/vlan/(id)/hello-time

## Parameters

### *description*

Specifies description.

### *bridge-priority*

Specifies bridge priority.

### *interval*

Specifies the error disable timeout interval.

### *forward-delay*

Specifies the forward delay.

### *max-age*

Specifies max age.

### *path-cost*

Specifies the path cost.

### *hello-time*

Specifies the hello time.

## Usage Guidelines

### Examples

The following example uses the GET option to retrieve the configuration details.

#### URI

http://host:80/rest/config/running/protocol/spanning-tree/pvst/

#### Request Body

None

#### Response Body

```
<pvst xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/protocol/spanning-tree/pvst">
  <hello-time>3</hello-time>
  <forward-delay>14</forward-delay>
  <max-age>19</max-age>
  <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/pvst/error-disable-
timeout">
    <enable>true</enable>
    <interval>100</interval>
  </error-disable-timeout>
  <port-channel y:self="/rest/config/running/protocol/spanning-tree/pvst/port-channel">
  </port-channel>
  <vlan y:self="/rest/config/running/protocol/spanning-tree/pvst/vlan/100">
    <id>100</id>
  </vlan>
  <vlan y:self="/rest/config/running/protocol/spanning-tree/pvst/vlan/102">
    <id>102</id>
  </vlan>
</pvst>
```

The following example uses the POST option to configure PVST.

#### URI

http://host:80/rest/config/running/protocol

#### Request Body

```
<pvst/>
```

#### Response Body

None

The following example uses the DELETE option to remove PVST configuration.

### *URI*

http://host:80/rest/config/running/protocol/pvst

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/spanning-tree/rpvst

Configures Rapid Per-VLAN Spanning Tree (RPVST).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/rpvst	Configures RPVST.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree/rpvst	Retrieves RPVST configuration information.
<base_URI>/config/running/protocol/spanning-tree/rpvst/description	Retrieves RPVST description.
<base_URI>/config/running/protocol/spanning-tree/rpvst/bridge-priority	Retrieves bridge priority for the common instance
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/enable	Retrieves error disable timeout information.
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/interval	Retrieves error disable timeout interval details.
<base_URI>/config/running/protocol/spanning-tree/rpvst/forward-delay	Retrieves forward delay information.
<base_URI>/config/running/protocol/spanning-tree/rpvst/max-age	Retrieves max age information.
<base_URI>/config/running/protocol/spanning-tree/rpvst/port-channel/path-cost	Retrieves path cost.
<base_URI>/config/running/protocol/spanning-tree/rpvst/shutdown	Disables RPVST.
<base_URI>/config/running/protocol/spanning-tree/rpvst/hello-time	Retrieves hello time.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/{id}/forward-delay	Retrieves forward delay information for a particular VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/{id}/max-age	Retrieves max age information for a particular VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/{id}/hello-time	Retrieves hello time information for a particular VLAN.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree	<rpvst />	Configures RPVST.
<base_URI>/config/running/protocol/spanning-tree/rpvst	<vlan><id>{req_val}</id><priority>{uint32}</priority></vlan>	Configures RPVST priority.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rpvst/description	<description />	Configures RPVST description.
<base_URI>/config/running/protocol/spanning-tree/rpvst/bridge-priority	<bridge-priority />	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/enable	<enable />	Enables error disable timeout.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/interval	<interval />	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/rpvst/forward-delay	<forward-delay />	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/rpvst/max-age	<max-age />	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/rpvst/port-channel/path-cost	<path-cost />	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/rpvst/shutdown	<shutdown />	Disables RPVST.
<base_URI>/config/running/protocol/spanning-tree/rpvst/hello-time	<hello-time />	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)	<vlan><priority>(uint32)</priority></vlan>	Configures priority for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)	<vlan><forward-delay>(uint32)</forward-delay></vlan>	Configures forward delay for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)	<vlan><max-age>(uint32)</max-age></vlan>	Configures max age for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)	<vlan><hello-time>(uint32)</hello-time></vlan>	Configures hello time for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/transmit-holdcount	<transmit-holdcount />	Configures transmit hold count.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rpvst/description	<description />	Configures RPVST description.
<base_URI>/config/running/protocol/spanning-tree/rpvst/bridge-priority	<bridge-priority />	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/enable	<enable />	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/interval	<interval />	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/rpvst/forward-delay	<forward-delay />	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/rpvst/max-age	<max-age />	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/rpvst/port-channel/path-cost	<path-cost />	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/rpvst/shutdown	<shutdown />	Disables RPVST.
<base_URI>/config/running/protocol/spanning-tree/rpvst/hello-time	<hello-time />	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/forward-delay	<forward-delay/>	Configures forward delay for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/max-age	<max-age/>	Configures max age for a VLAN.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/hello-time	<hello-time />	Configures hello time for a VLAN.
<base_URI>/config/running/protocol/spanning-tree/rpvst/transmit-holdcount	<transmit-holdcount />	Configures transmit hold count.

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/rpvst
<base_URI>/config/running/protocol/spanning-tree/rpvst/description
<base_URI>/config/running/protocol/spanning-tree/rpvst/bridge-priority
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/enable
<base_URI>/config/running/protocol/spanning-tree/rpvst/error-disable-timeout/interval
<base_URI>/config/running/protocol/spanning-tree/rpvst/forward-delay
<base_URI>/config/running/protocol/spanning-tree/rpvst/max-age
<base_URI>/config/running/protocol/spanning-tree/rpvst/port-channel/path-cost
<base_URI>/config/running/protocol/spanning-tree/rpvst/shutdown
<base_URI>/config/running/protocol/spanning-tree/rpvst/hello-time
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/forward-delay
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/max-age
<base_URI>/config/running/protocol/spanning-tree/rpvst/vlan/(id)/hello-time
<base_URI>/config/running/protocol/spanning-tree/rpvst/transmit-holdcount

## Parameters

### *description*

Specifies description.

### *bridge-priority*

Specifies bridge priority.

### *interval*

Specifies the error disable timeout interval.

### *forward-delay*

Specifies the forward delay.

### *max-age*

Specifies max age.

### *path-cost*

Specifies the path cost.

### *hello-time*

Specifies the hello time.

### *transmit-holdcount*

Specifies transmit hold count.

## Usage Guidelines

### Examples

The following example uses the GET option to retrieve the configuration details.

#### URI

http://host:80/rest/config/running/protocol/spanning-tree/rpvst

#### Request Body

None

#### Response Body

```
<rpvst xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/protocol/spanning-tree/rpvst">
  <hello-time>3</hello-time>
  <forward-delay>14</forward-delay>
  <max-age>19</max-age>
  <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/rpvst/error-disable-
timeout">
    <enable>true</enable>
    <interval>100</interval>
  </error-disable-timeout>
  <port-channel y:self="/rest/config/running/protocol/spanning-tree/rpvst/port-channel">
  </port-channel>
  <vlan y:self="/rest/config/running/protocol/spanning-tree/rpvst/vlan/100">
    <id>100</id>
  </vlan>
  <vlan y:self="/rest/config/running/protocol/spanning-tree/rpvst/vlan/102">
    <id>102</id>
  </vlan>
</rpvst>
```

The following example uses the POST option to configure RPVST.

#### URI

http://host:80/rest/config/running/protocol

#### Request Body

```
<rpvst/>
```

#### Response Body

None



The following example uses the DELETE option to remove RPVST configuration.

### *URI*

http://host:80/rest/config/running/protocol/rpvst

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/spanning-tree/rstp

Configures, retrieves, and modifies Rapid Spanning-Tree Protocol (RSTP).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/rstp	Configures RSTP.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree/rstp	Retrieves RSTP.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout	Retrieves error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel	Retrieves RSTP on port channel.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree	<rstp></rstp>	Configures RSTP.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout	<enable></enable>	Enables RSTP error disable.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel	<shutdown></shutdown>	Shuts down.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rstp/description	<description>(string)</description>	Configures RSTP description.
<base_URI>/config/running/protocol/spanning-tree/rstp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures RSTP bridge priority.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/enable	<enable></enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/rstp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/rstp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel/path-cost	<path-cost>(string)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/rstp/shutdown	<shutdown></shutdown>	Shuts down.
<base_URI>/config/running/protocol/spanning-tree/rstp/hello-time	<hello-time>(unit32)</hello-time>	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/rstp/transmit-holdcount	<transmit-holdcount>(unit32)</transmit-holdcount>	Configures transmit hold count.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/rstp/description	<description>(string)</description>	Configures RSTP description.
<base_URI>/config/running/protocol/spanning-tree/rstp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures RSTP bridge priority.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/enable	<enable></enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/rstp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/rstp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel/path-cost	<path-cost>(string)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/rstp/shutdown	<shutdown></shutdown>	Shuts down.
<base_URI>/config/running/protocol/spanning-tree/rstp/hello-time	<hello-time>(unit32)</hello-time>	Configures hello time.
<base_URI>/config/running/protocol/spanning-tree/rstp/transmit-holdcount	<transmit-holdcount>(unit32)</transmit-holdcount>	Configures transmit hold count.

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/rstp/description
<base_URI>/config/running/protocol/spanning-tree/rstp/bridge-priority
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/enable
<base_URI>/config/running/protocol/spanning-tree/rstp/error-disable-timeout/interval
<base_URI>/config/running/protocol/spanning-tree/rstp/forward-delay
<base_URI>/config/running/protocol/spanning-tree/rstp/max-age
<base_URI>/config/running/protocol/spanning-tree/rstp/port-channel/path-cost
<base_URI>/config/running/protocol/spanning-tree/rstp/shutdown
<base_URI>/config/running/protocol/spanning-tree/rstp/hello-time
<base_URI>/config/running/protocol/spanning-tree/rstp/transmit-holdcount

## Parameters

### *description*

Specifies description.

### *bridge-priority*

Specifies bridge priority.

### *interval*

Specifies the interval.

### *forward-delay*

Specifies the forward delay.

*max-age*

Specifies max age.

*path-cost*

Specifies the path cost.

*hello-time*

Specifies the hello time.

*transmit-holdcount*

Specifies transmit hold count.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/protocol/spanning-tree

### Request Body

None

### Response Body

```
<spanning-tree xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol/spanning-tree">
  <rstp y:self="/rest/config/running/protocol/spanning-tree/rstp">
    <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/rstp/error-disable-timeout">
      </error-disable-timeout>
    <port-channel y:self="/rest/config/running/protocol/spanning-tree/rstp/port-channel">
      </port-channel>
    </rstp>
  </spanning-tree>
```

The following example uses the POST option to configure RSTP.

### *URI*

http://host:80/rest/config/running/protocol/spanning-tree

### *Request Body*

```
<rstp></rstp>
```

### *Response Body*

None

The following example uses the DELETE option to remove RSTP description.

### *URI*

http://host:80/rest/config/running/protocol/spanning-tree/rstp/description

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/spanning-tree/stp

Configures Spanning Tree Protocol (STP).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/spanning-tree/stp	Configures STP.

GET URIs	Description
<base_URI>/config/running/protocol/spanning-tree/stp	Retrieves STP details.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout	Retrieves error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel	Retrieves port channel details.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout	<enable>(enumeration)</enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp	<shutdown>(enumeration)</shutdown>	Shuts down.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/description	<description>(string)</description>	Configures STP description.
<base_URI>/config/running/protocol/spanning-tree/stp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/enable	<enable>(enumeration)</enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/stp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/stp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel/path-cost	<path-cost>(enumeration)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/stp/shutdown	<shutdown>(enumeration)</shutdown>	Shuts down.
<base_URI>/config/running/protocol/spanning-tree/stp/hello-time	<hello-time>(unit32)</hello-time>	Configures hello time.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/description	<description>(string)</description>	Configures STP description.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/spanning-tree/stp/bridge-priority	<bridge-priority>(unit32)</bridge-priority>	Configures bridge priority.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/enable	<enable>(enumeration)</enable>	Enables error disable timeout.
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/interval	<interval>(unit32)</interval>	Configures error disable timeout interval.
<base_URI>/config/running/protocol/spanning-tree/stp/forward-delay	<forward-delay>(unit32)</forward-delay>	Configures forward delay.
<base_URI>/config/running/protocol/spanning-tree/stp/max-age	<max-age>(unit32)</max-age>	Configures max age.
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel/path-cost	<path-cost>(enumeration)</path-cost>	Configures path cost.
<base_URI>/config/running/protocol/spanning-tree/stp/shutdown	<shutdown>(enumeration)</shutdown>	Shuts down.
<base_URI>/config/running/protocol/spanning-tree/stp/hello-time	<hello-time>(unit32)</hello-time>	Configures hello time.

DELETE URIs
<base_URI>/config/running/protocol/spanning-tree/stp/description
<base_URI>/config/running/protocol/spanning-tree/stp/bridge-priority
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout
<base_URI>/config/running/protocol/spanning-tree/stp/error-disable-timeout/interval
<base_URI>/config/running/protocol/spanning-tree/stp/forward-delay
<base_URI>/config/running/protocol/spanning-tree/stp/max-age
<base_URI>/config/running/protocol/spanning-tree/stp/port-channel/path-cost
<base_URI>/config/running/protocol/spanning-tree/stp/shutdown
<base_URI>/config/running/protocol/spanning-tree/stp/hello-time

## Parameters

### *description*

Specifies description.

### *bridge-priority*

Specifies bridge priority.

### *interval*

Specifies the interval.

### *forward-delay*

Specifies the forward delay.

### *max-age*

Specifies max age.

### *path-cost*

Specifies the path cost.

*hello-time*

Specifies the hello time.

*transmit-holdcount*

Specifies transmit hold count.

## Usage Guidelines

GET, POST, PATCH, PUT, DELETE, HEAD, and OPTIONS operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

`http://host:80/rest/config/running/protocol/spanning-tree/stp`

### Request Body

None

### Response Body

```
<stp xmlns="urn:brocade.com:mgmt:brocade-xstp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/protocol/spanning-tree/stp">
  <hello-time>3</hello-time>
  <forward-delay>14</forward-delay>
  <max-age>19</max-age>
  <bridge-priority>4096</bridge-priority>
  <error-disable-timeout y:self="/rest/config/running/protocol/spanning-tree/stp/error-disable-timeout">
    <enable>true</enable>
    <interval>100</interval>
  </error-disable-timeout>
  <port-channel y:self="/rest/config/running/protocol/spanning-tree/stp/port-channel">
    <path-cost>custom</path-cost>
  </port-channel>
</stp>
```

The following example uses the POST option to enable error disable timeout.

### URI

`http://host:80/rest/config/running/protocol/spanning-tree/stp/error-disable-timeout`

### Request Body

`<enable>enable</enable>`

### Response Body

None



The following example uses the DELETE option to remove STP description.

### *URI*

http://host:80/rest/config/running/protocol/spanning-tree/stp/description

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/vrrp

Configures, modifies, or retrieves Virtual Router Redundancy Protocol (VRRP).

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/vrrp	Configures Virtual Router Redundancy Protocol (VRRP)

GET URIs	Description
<base_URI>/config/running/protocol/vrrp	Retrieves Virtual Router Redundancy Protocol (VRRP)

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/vrrp	<vrrp>{enumeration}</vrrp>	Configures Virtual Router Redundancy Protocol (VRRP)

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/vrrp	<vrrp>{enumeration}</vrrp>	Configures Virtual Router Redundancy Protocol (VRRP)

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/protocol/vrrp

### Request Body

None

### Response Body

```
<vrrp xmlns="urn:brocade.com:mgmt:brocade-vrrp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol/vrrp">true</vrrp>
```

The following example uses the POST option to configure VRRP.

**URI**

http://host:80/rest/config/running/protocol

**Request Body**

<vrrp>true</vrrp>

**Response Body**

None

The following example uses the DELETE option to remove the VRRP configuration.

**URI**

http://host:80/rest/config/running/protocol/vrrp

**Request Body**

None

**Response Body**

None

## History

Release version	History
17s.1.00	This API call was introduced.

# protocol/vrrp-extended

Configures, modifies, or retrieves Virtual Router Redundancy Protocol Extended (VRRP-E)

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/vrrp-extended	Configures Virtual Router Redundancy Protocol Extended (VRRP-E)

GET URIs	Description
<base_URI>/config/running/protocol/vrrp-extended	Retrieves Virtual Router Redundancy Protocol Extended (VRRP-E)

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/vrrp-extended	<vrrp-extended>{enumeration}</vrrp-extended>	Configures VRRP-E. Allowed values; true, false.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/vrrp-extended	<vrrp-extended>{enumeration}</vrrp-extended>	Configures VRRP-E. Allowed values; true, false.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/protocol/vrrp-extended

### Request Body

None

### Response Body

```
<vrrp-extended xmlns="urn:brocade.com:mgmt:brocade-vrrp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol/vrrp-extended">true</vrrp-extended>
```

The following example uses the POST option to configure VRRP-E.

### *URI*

http://host:80/rest/config/running/protocol/

### *Request Body*

```
<vrrp-extended>true</vrrp-extended>
```

### *Response Body*

None

The following example uses the DELETE option to delete a VRRP-E configuration.

### *URI*

http://host:80/rest/config/running/protocol/vrrp-extended

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# qos

Configures, retrieves, and modifies QoS information.

## Resource URIs

URI	Description
<base_URI>/config/running/qos	Configures, retrieves, and modifies QoS information.

GET URIs	Description
<base_URI>/config/running/qos	Displays QoS information.
<base_URI>/config/running/qos/map	Displays QoS map information.
<base_URI>/config/running/qos/map/cos-mutation/{name}	Displays CoS-Mutation map
<base_URI>/config/running/qos/map/cos-mutation/{name}/map/{cos}	Maps CoS value to outbound CoS value.
<base_URI>/config/running/qos/map/cos-mutation/{name}/map/{cos}/to	Displays the CoS-to-CoS Mutation out value.
<base_URI>/config/running/qos/map/cos-traffic-class/{name}	Displays a named QoS traffic class map configuration.
<base_URI>/config/running/qos/map/cos-traffic-class/{name}/map/{cos}	Displays the traffic class map value.
<base_URI>/config/running/qos/map/cos-traffic-class/{name}/map/{cos}/to	Displays the traffic class-to-CoS Mutation out value.
<base_URI>/config/running/qos/map/cos-dscp/{name}	Maps CoS value to DSCP value.
<base_URI>/config/running/qos/map/cos-dscp/{name}/map/{cos}	Displays the DSCP-to-cos map value for a specified CoS.
<base_URI>/config/running/qos/map/cos-dscp/{name}/map/{cos}/to	Displays the DSCP-to-CoS out value.
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}	Displays the traffic-class-to-CoS map.
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}/map/{from-traffic-class},{from-drop-precedence}	Map Traffic-Class value with Drop-Precedence to CoS value
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}/map/{from-traffic-class},{from-drop-precedence}/to	Displays the Traffic-Class value with Drop-Precedence to CoS mapping out value.
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}	Displays traffic class mutation map configuration.
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}/map/{from-traffic-class}	Maps Traffic-Class value to outbound Traffic-Class value.
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}/map/{from-traffic-class}/to	Displays the traffic class-to-CoS Mutation out value for a specified traffic-class.
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}	Displays traffic class to DSCP mutation map configuration.
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}/map/{from-traffic-class}	Displays traffic class to DSCP mutation map
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}/map/{from-traffic-class}/to	Map Traffic-Class value to DSCP value.
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}	Configure DSCP-Mutation map.
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}/map/{dscp}	Map DSCP values to outbound DSCP value.

GET URIs	Description
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}/map/{dscp}/to	Map DSCP values to outbound DSCP value.
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}	Configure DSCP-to-Traffic-Class map
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}	Map DSCP values to Traffic-Class value with Drop-Precedence.
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to	Map DSCP values to Traffic-Class value with Drop-Precedence.
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to/drop-precedence	Out Drop-Precedence for DSCP to Traffic-Class map.
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}	Displays configuration for a named DSCP-to-CoS map.
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}/map/{dscp}	Displays the DSCP-to-CoS mapping dscp value.
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}/map/{dscp}/to	Displays the DSCP-to-CoS mapping out value.
<base_URI>/config/running/qos/red-profile/{profile-id}	Displays Random Early Drop (RED) profile.
<base_URI>/config/running/qos/tx-queue	Displays transmit direction queue.
<base_URI>/config/running/qos/tx-queue/limit	Displays the buffer usage limit for egress lossy unicast queues
<base_URI>/config/running/qos/tx-queue/scheduler	Displays priority scheduling.
<base_URI>/config/running/qos/tx-queue/scheduler/strict-priority	Displays strict priority scheduling.
<base_URI>/config/running/qos/tx-queue/scheduler/strict-priority/dwrr-traffic-class-last	Displays Deficit weighted round robin (DWRR) scheduling.
<base_URI>/config/running/qos/rx-queue	Displays receive direction queue.
<base_URI>/config/running/qos/rx-queue/limit	Displays receive direction queue limit.

POST URIs	Payload	Description
<base_URI>/config/running/qos/map	<cos-mutation><name>{map-name-type}</name></cos-mutation>	Configure CoS-Mutation map
<base_URI>/config/running/qos/map	<cos-traffic-class><name>{map-name-type}</name></cos-traffic-class>	Configure CoS-to-Traffic-Class map.
<base_URI>/config/running/qos/map/cos-traffic-class/{name}	<map><cos>{cos-id-type}</cos><to><traffic-class>{traffic-class-id-type}</traffic-class><drop-precedence>{drop-precedence-id-type}</drop-precedence></to></map>	Map CoS value to Traffic-Class value with Drop-Precedence.
<base_URI>/config/running/qos/map	<cos-dscp><name>{map-name-type}</name></cos-dscp>	Configure CoS-to-DSCP map.
<base_URI>/config/running/qos/map/cos-dscp/{name}	<map><cos>{cos-id-type}</cos><to><dscp>{dscp-id-type}</dscp></to></map>	Map CoS value to DSCP value.
<base_URI>/config/running/qos/map	<traffic-class-cos><traffic-class-cos-map-name>{map-name-type}</traffic-class-cos-map-name></traffic-class-cos>	Configure Traffic-Class-to-CoS map
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}	<map><from-traffic-class>{traffic-class-id-type}</from-traffic-class><from-drop-precedence>{drop-precedence-id-type}</from-drop-precedence><to><cos>{cos-id-type}</cos></to></map>	Map Traffic-Class value with Drop-Precedence to CoS value

POST URIs	Payload	Description
<base_URI>/config/running/qos/map	<traffic-class-mutation><name>{map-name-type}</name></traffic-class-mutation>	Configure Traffic-Class-Mutation map
<base_URI>/config/running/qos/map	<traffic-class-dscp><name>{map-name-type}</name></traffic-class-dscp>	Configure Traffic-Class-to-DSCP map
<base_URI>/config/running/qos/map	<dscp-mutation><dscp-mutation-map-name>{map-name-type}</dscp-mutation-map-name></dscp-mutation>	Configure DSCP-Mutation map
<base_URI>/config/running/qos/map	<dscp-traffic-class><dscp-traffic-class-map-name>{map-name-type}</dscp-traffic-class-map-name></dscp-traffic-class>	Configure DSCP-to-Traffic-Class map
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}	<map><dscp>{dscp-id-range-type}</dscp><to><traffic-class>{traffic-class-id-type}</traffic-class></to></map>	Map DSCP values to Traffic-Class value with Drop-Precedence
<base_URI>/config/running/qos/map	<dscp-cos><dscp-cos-map-name>{map-name-type}</dscp-cos-map-name></dscp-cos>	Configures DSCP-to-CoS map
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}	<map><dscp>{dscp-id-range-type}</dscp><to><cos>{cos-id-type}</cos></to></map>	Maps DSCP values to CoS value for specified DSCP in value and out-CoS out value.
<base_URI>/config/running/qos	<red-profile><profile-id>{red-profile-id-type}</profile-id><min-threshold>{int32}</min-threshold><max-threshold>{int32}</max-threshold><drop-probability>{int32}</drop-probability></red-profile>	Configures RED profiles.

PUT URIs	Payload	Description
<base_URI>/config/running/qos/map/cos-mutation/{name}/map/{cos}/to/cos-traffic-class	<map><cos>{cos-id-type}</cos><to><cos>{cos-id-type}</cos></to></map>	Map CoS value to outbound CoS value.
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}/map/{from-traffic-class}/to/traffic-class-dscp	<map><from-traffic-class>{traffic-class-id-type}</from-traffic-class><to><traffic-class>{traffic-class-id-type}</traffic-class></to></map>	Map Traffic-Class value to outbound Traffic-Class value.
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}/map/{from-traffic-class}/to/dscp-mutation	<map><from-traffic-class>{traffic-class-id-type}</from-traffic-class><to><dscp>{dscp-id-type}</dscp></to></map>	Map Traffic-Class value to DSCP value.
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}/map/{dscp}/to/dscp-traffic-class	<map><dscp>{dscp-id-range-type}</dscp><to><dscp>{dscp-id-type}</dscp></to></map>	Map DSCP values to outbound DSCP value.
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to/drop-precedence	<drop-precedence>{drop-precedence-id-type}</drop-precedence>	Configures Out Drop-Precedence.
<base_URI>/config/running/qos/tx-queue/limit	<limit>{uint32}</limit>	Sets limit for the buffer usage for egress lossy unicast queues.
<base_URI>/config/running/qos/tx-queue/scheduler/strict-priority	<strict-priority><priority-number>{int32}</priority-number><scheduler-type>{enumeration}</scheduler-type><dwrr-traffic-class0>{int32}</dwrr-traffic-class0><dwrr-traffic-class1>{int32}</dwrr-traffic-class1><dwrr-traffic-class2>{int32}</dwrr-traffic-class2><dwrr-traffic-class3>{int32}</dwrr-traffic-class3><dwrr-traffic-class4>{int32}</dwrr-traffic-	Configures Strict Priority Queues.



PUT URIs	Payload	Description
	class4><dwrr-traffic-class5>{int32}</dwrr-traffic-class5><dwrr-traffic-class6>{int32}</dwrr-traffic-class6><dwrr-traffic-class-last>{int32}</dwrr-traffic-class-last></strict-priority>	
<base_URI>/config/running/qos/rx-queue/limit	<limit>{uint32}</limit>	Configures Ingress Queue Limit.

PATCH URIs	Payload	Description
<base_URI>/config/running/qos/map/cos-mutation/{name}/map/{cos}/to/cos-traffic-class	<to><cos>{cos-id-type}</cos></to>	Configures Out CoS.
<base_URI>/config/running/qos/map/cos-traffic-class/{name}/map/{cos}/to	<to><traffic-class>{traffic-class-id-type}</traffic-class><drop-precedence>{drop-precedence-id-type}</drop-precedence></to>	Configures Out Traffic-Class and Out Drop-Precedence.
<base_URI>/config/running/qos/map/cos-dscp/{name}/map/{cos}/to	<to><dscp>{dscp-id-type}</dscp></to>	Configures Out DSCP.
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}/map/{from-traffic-class},{from-drop-precedence}/to	<to><cos>{cos-id-type}</cos></to>	Configures Out CoS.
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}/map/{from-traffic-class}/to/traffic-class-dscp	<to><traffic-class>{traffic-class-id-type}</traffic-class></to>	Configures Out Traffic-Class.
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}/map/{from-traffic-class}/to/dscp-mutation	<to><dscp>{dscp-id-type}</dscp></to>	Configures Out DSCP for traffic-class to DSCP map.
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}/map/{dscp}/to/dscp-traffic-class	<to><dscp>{dscp-id-type}</dscp></to>	Configures Out DSCP for DSCP mutation map.
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to	<to><traffic-class>{traffic-class-id-type}</traffic-class></to>	Configures Out Traffic-Class.
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to	<to><drop-precedence>{drop-precedence-id-type}</drop-precedence></to>	Configures Out Drop-Precedence
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}/map/{dscp}/to	<to><cos>{cos-id-type}</cos></to>	Configures Out CoS.
<base_URI>/config/running/qos/red-profile/{profile-id}	<red-profile><min-threshold>{int32}</min-threshold><max-threshold>{int32}</max-threshold><drop-probability>{int32}</drop-probability></red-profile>	Configures RED profiles.
<base_URI>/config/running/qos/tx-queue	<tx-queue><limit>{uint32}</limit></tx-queue>	Configures Egress Queue Limit.
<base_URI>/config/running/qos/tx-queue/scheduler/strict-priority	<strict-priority><priority-number>{int32}</priority-number><scheduler-type>{enumeration}</scheduler-type><dwrr-traffic-class0>{int32}</dwrr-traffic-class0><dwrr-traffic-class1>{int32}</dwrr-traffic-class1><dwrr-traffic-class2>{int32}</dwrr-traffic-class2><dwrr-traffic-class3>{int32}</dwrr-traffic-class3><dwrr-traffic-class4>{int32}</dwrr-traffic-	Configures Strict Priority Queues.

PATCH URIs	Payload	Description
	class4<>dwrr-traffic-class5>{int32}</dwrr-traffic-class5><dwrr-traffic-class6>{int32}</dwrr-traffic-class6><dwrr-traffic-class-last>{int32}</dwrr-traffic-class-last></strict-priority>	
<base_URI>/config/running/qos/rx-queue	<rx-queue><limit>{uint32}</limit></rx-queue>	Configures Ingress Queue Limit.

DELETE URIs
<base_URI>/config/running/qos/map/cos-mutation/{name}
<base_URI>/config/running/qos/map/cos-mutation/{name}/map/{cos}
<base_URI>/config/running/qos/map/cos-traffic-class/{name}
<base_URI>/config/running/qos/map/cos-traffic-class/{name}/map/{cos}
<base_URI>/config/running/qos/map/cos-dscp/{name}
<base_URI>/config/running/qos/map/cos-dscp/{name}/map/{cos}
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}
<base_URI>/config/running/qos/map/traffic-class-cos/{traffic-class-cos-map-name}/map/{from-traffic-class},{from-drop-precedence}
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}
<base_URI>/config/running/qos/map/traffic-class-mutation/{name}/map/{from-traffic-class}
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}
<base_URI>/config/running/qos/map/traffic-class-dscp/{name}/map/{from-traffic-class}
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}/map/{dscp}
<base_URI>/config/running/qos/map/dscp-mutation/{dscp-mutation-map-name}/map/{dscp}/to
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to
<base_URI>/config/running/qos/map/dscp-traffic-class/{dscp-traffic-class-map-name}/map/{dscp}/to/drop-precedence
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}/map/{dscp}
<base_URI>/config/running/qos/map/dscp-cos/{dscp-cos-map-name}/map/{dscp}/to
<base_URI>/config/running/qos/red-profile/{profile-id}
<base_URI>/config/running/qos/tx-queue/limit
<base_URI>/config/running/qos/tx-queue/scheduler
<base_URI>/config/running/qos/rx-queue/limit

## Parameters

### *limit*

The TX-queue limit. The queue limit is set to one of the following values (the next higher value above the configured value). For example, if the value is default of 512 Kbytes, the queue limit is set to 748288 bytes on the Brocade SLX 9140 or 570368 bytes on the Brocade SLX 9240.

## Usage Guidelines

GET, POST, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the cos-dscp configuration details.

### URI

http://host:80/rest/config/running/qos/map/cos-dscp

### Request Body

None

### Response Body

```
<cos-dscp xmlns="urn:brocade.com:mgmt:brocade-qos-mls" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/qos/map/cos-dscp/all-zero-map">
  <name>all-zero-map</name>
</cos-dscp>
<cos-dscp xmlns="urn:brocade.com:mgmt:brocade-qos-mls" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/qos/map/cos-dscp/default">
  <name>default</name>
</cos-dscp>
<cos-dscp xmlns="urn:brocade.com:mgmt:brocade-qos-mls" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/qos/map/cos-dscp/map1">
  <name>map1</name>
</cos-dscp>
```

The following is an example of the PATCH operation to configure "map1".

### URI

http://host:80/rest/config/running/qos/map/cos-dscp

### Request Body

```
<cos-dscp><name>map1</name></cos-dscp>
```

### Response Body

None

The following is an example of the DELETE operation to remove the configuration for "map1".

### *URI*

http://host:80/rest/config/running/qos/map/cos-dscp/map1

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# radius-server

Configures, retrieves, and modifies Remote Authentication Dial-In User Service (RADIUS) server.

## Resource URIs

URI	Description
<base_URI>/config/running/radius-server	Configures RADIUS server.

GET URIs	Description
<base_URI>/config/running/radius-server	Configures RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}	Configures the host name of the RADIUS server and specifies a VRF though which to communicate with the RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/auth-port	Configures UDP port for authentication (default=1812).
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/protocol	Specifies the authentication protocol. Parameters include CHAP, PAP, or PEAP-MSCHAP. The default is CHAP.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/key	Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret .
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/encryption-level	Designates the encryption level for the shared secret key operation.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/retries	Configures the number of attempts allowed to connect to a RADIUS server. The default is 5 attempts.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/timeout	Configures the time to wait for the RADIUS server to respond, in seconds. The default is 5 seconds.

PATCH URIs	Payload	Description
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}	<host><auth-port>{rad-auth-port}</auth-port></host>	Configures the host name of the RADIUS server and specifies a VRF though which to communicate with the RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}	<host><key>{string}</key></host>	Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}	<host><encryption-level>{enumeration}</encryption-level></host>	Designates the encryption level for the shared secret key operation.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}	<host><retries>{uint32}</retries></host>	Configures the number of attempts allowed to connect to a RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}	<host><timeout>{uint32}</timeout></host>	Configures the time to wait for the RADIUS server to respond, in seconds.

PUT URIs	Payload	Description
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/auth-port	<auth-port>{rad-auth-port}</auth-port>	Configures UDP port for authentication (default=1812).
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/key	<key>{string}</key>	Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/encryption-level	<encryption-level>{enumeration}</encryption-level>	Designates the encryption level for the shared secret key operation.

PUT URIs	Payload	Description
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/retries	<retries>{uint32}</retries>	Configures the number of attempts allowed to connect to a RADIUS server.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/timeout	<timeout>{uint32}</timeout>	Configures the time to wait for the RADIUS server to respond, in seconds.

DELETE URIs
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/auth-port
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/protocol
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/key
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/encryption-level
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/retries
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/timeout

## Parameters

### *auth-port*

Specifies the UDP port for authentication (default=1812).

### *key*

Specifies the text string that is used as the shared secret between the device and the RADIUS server. The default is sharedsecret.

### *encryption-level*

Designates the encryption level for the shared secret key operation. The valid values are 0 and 7, with 0 being clear text and 7 being the most heavily encrypted. The default value is 7.

### *auth-port*

Specifies the readiness test interval value in seconds. Valid values range from 1 through 65535. The default readiness test interval is 10 seconds.

### *retries*

Specifies the number of attempts allowed to connect to a RADIUS server. The default is 5 attempts.

### *timeout*

Specifies the time to wait for the RADIUS server to respond, in seconds. The default is 5 seconds.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/radius-server

### Request Body

None

### Response Body

```
<radius-server xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/radius-server">
  <host y:self="/rest/config/running/radius-server/host/50.50.50.50%2Cdata-vrf-1">
    <hostname>50.50.50.50</hostname>
    <use-vrf>data-vrf-1</use-vrf>
  </host>
  <host y:self="/rest/config/running/radius-server/host/10.20.106.145%2Cdata-vrf">
    <hostname>10.20.106.145</hostname>
    <use-vrf>data-vrf</use-vrf>
  </host>
</radius-server>
```

The following example uses the PUT option to configure RADIUS server.

### URI

http://host:80/rest/config/running/config/running/radius-server/host/10.20.106.145/data-vrf/auth-port

### Request Body

```
<auth-port>11111</auth-port>
```

### Response Body

None

The following example uses the DELETE option to remove RADIUS server.

### URI

http://host:80/rest/config/running/radius-server/host/10.20.106.145/data-vrf

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.



# rmon

Configures, modifies, or retrieves Remote Monitoring Protocol (RMON) information.

## Resource URIs

URI	Description
<base_URI>/config/running/rmon	Remote Monitoring Protocol (RMON).

GET URIs	Description
<base_URI>/config/running/rmon	Remote Monitoring Protocol (RMON).
<base_URI>/config/running/rmon/event/{event-index}/description	Retrieves event description.
<base_URI>/config/running/rmon/event/{event-index}/log	Retrieves logged events.
<base_URI>/config/running/rmon/event/{event-index}/trap	Retrieves event trap information.
<base_URI>/config/running/rmon/event/{event-index}/owner	Retrieves event owner identity.
<base_URI>/config/running/rmon/alarm/{alarm-index}/event	Retrieves event for falling alarm.
<base_URI>/config/running/rmon/alarm/{alarm-index}/owner	Retrieves alarm owner identity.

POST URIs	Payload	Description
<base_URI>/config/running/rmon	<event><event-index>(int32)</event-index></event>	Configures RMON event.
<base_URI>/config/running/rmon	<alarm><alarm-index>(int32)</alarm-index><snmp-oid>(string)</snmp-oid><interval>(int32)</interval><type>(string)</type><rising-threshold>(unit32)</rising-threshold><event>(int32)</event></alarm>	Configures RMON alarm.

PATCH URIs	Payload	Description
<base_URI>/config/running/rmon/event/{event-index}	<event><description>(string)</description></event>	Configures RMON event description.
<base_URI>/config/running/rmon/event/{event-index}	<event><log>(string)</log></event>	Configures event log.
<base_URI>/config/running/rmon/event/{event-index}	<event><trap>(string)</trap></event>	Configures event trap.
<base_URI>/config/running/rmon/event/{event-index}	<event><owner>(string)</owner></event>	Configures event owner.
<base_URI>/config/running/rmon/alarm/{alarm-index}	<alarm><snmp-oid>(string)</snmp-oid><interval>(int32)</interval><type>(string)</type><rising-threshold>(unit32)</rising-threshold><event>(int32)</event></alarm>	Configures RMON alarm.
<base_URI>/config/running/rmon/alarm/{alarm-index}	<alarm><falling-threshold>(uint32)</falling-threshold><event>(int32)</event></alarm>	Configures alarm falling threshold.
<base_URI>/config/running/rmon/alarm/{alarm-index}	<alarm><owner>(string)</owner></alarm>	Configures alarm owner.

PUT URIs	Payload	Description
<base_URI>/config/running/rmon/event/{event-index}	<description>(string)</description>	Configures RMON event description.
<base_URI>/config/running/rmon/event/{event-index}/log	<log>(string)</log>	Configures event log.
<base_URI>/config/running/rmon/event/{event-index}/trap	<trap>(string)</trap>	Configures event trap.
<base_URI>/config/running/rmon/event/{event-index}/owner	<owner>(string)</owner>	Configures event owner.
<base_URI>/config/running/rmon/alarm/{alarm-index}	<alarm><falling-threshold>(uint32)</falling-threshold><event>(int32)</event></alarm>	Configures alarm falling threshold.
<base_URI>/config/running/rmon/alarm/{alarm-index}/owner	<owner>(string)</owner>	Configures alarm owner.

DELETE URIs
<base_URI>/config/running/rmon/event/{event-index}
<base_URI>/config/running/rmon/event/{event-index}/description
<base_URI>/config/running/rmon/event/{event-index}/log
<base_URI>/config/running/rmon/event/{event-index}/trap
<base_URI>/config/running/rmon/event/{event-index}/owner
<base_URI>/config/running/rmon/alarm/{alarm-index}
<base_URI>/config/running/rmon/alarm/{alarm-index}/event
<base_URI>/config/running/rmon/alarm/{alarm-index}/owner

## Parameters

### *alarm-index*

Configures RMON alarm. The range is from 1 to 65535.

### *rising-threshold*

Configures rising threshold. The range is from 0 to 4294967295.

### *falling-threshold*

Configures falling threshold. The range is from 0 to 4294967295.

### *snmp-oid*

Configures SNMP OID.

### *interval*

Configures alarm sample interval.

### *event-index*

Configures RMON event. The range is from 1 to 65535.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/rmon/event/200/description

### Request Body

None

### Response Body

```
<description xmlns="urn:brocade.com:mgmt:brocade-rmon" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/rmon/event/200/description">hi_32768</description>
```

The following example uses the POST option to configure alarm.

### URI

http://host:80/rest/config/running/rmon

### Request Body

```
<alarm>
  <alarm-index>100</alarm-index>
  <snmp-oid>1.3.6.1.2.1.16.1.1.1.5.65535</snmp-oid>
  <interval>10</interval>
  <type>absolute</type>
  <rising-threshold>10000</rising-threshold>
  <event>100</event>
</alarm>
```

### Response Body

None

The following example uses the DELETE option to remove RMON event.

### URI

http://host:80/rest/config/running/rmon/event/100

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# role

Configures, modifies, or retrieves role configurations.

## Resource URIs

URI	Description
<base_URI>/config/running/role	Role configuration.
<base_URI>/config/running/role/name	Name of the role.

## Parameters

*name*

Specifies the name of the role.

*desc*

Specifies the description of the role.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/role

### Request Body

None

### Response Body

```
<role xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/role">
  <name y:self="/rest/config/running/role/name/admin">
    <name>admin</name>
    <desc>Administrator</desc>
  </name>
  <name y:self="/rest/config/running/role/name/admin2">
    <name>admin2</name>
  </name>
  <name y:self="/rest/config/running/role/name/trial">
    <name>trial</name>
  </name>
  <name y:self="/rest/config/running/role/name/user">
    <name>user</name>
    <desc>User</desc>
  </name>
</role>
```

The following is an example of the POST operation to add a role name and description.

### URI

http://host:80/rest/config/running/role

### Request Body

```
<name>
  <name>user3</name>
  <desc>user</desc>
</name>
```

### Response Body

None

The following is an example of the DELETE operation to remove a user.

### *URI*

http://host:80/rest/config/running/role/name/user3

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# route-map

Configures, retrieves, and modifies route-map instance.

## Resource URIs

URI	Description
<base_URI>/config/running/route-map/{name},{action-rm},{instance}	Configures route-map instance.

GET URIs	Description
<base_URI>/config/running/route-map/{name},{action-rm},{instance}	Configures a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match	Matches conditions.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/vrf	Match condition specified as a non-default VRF. Valid values range from 0 through 4294967295.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface	Matches interface conditions in a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/ethernet	Specifies an Ethernet interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/loopback	Specifies a loopback interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/ve	Specifies a virtual Ethernet VLAN interface
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6	Matches Internet Protocol (IPv6).
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address	Matches an IPv6 address in a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address/acl	Matches an IP address in a route-map instance and specifies access list.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip	Internet Protocol (IP).
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address	Matches an IP address in a route-map instance
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address/acl	Specifies the name of the access list .
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/next-hop	Matches IP next-hop match conditions in a route-map instance
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set	Set values.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip	Internet Protocol (IP).
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/dscp	DSCP
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/dscp/dscp-rms	DSCP
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface	Interface
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface/null0	Sends traffic to a Null0 Interface.



GET URIs	Description
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-hop	Sets the IPv4 address of the next hop in a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-hop/peer-address	BGP peer IP address
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-hop/next-hop-list/{next-hop-addr}	Sets the IPv4 address of the next hop in a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/global	Global
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/global/next-global-hop/{next-hop}	Sets next global hop.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-vrf-list/{vrf},{next-hop}	Sets next VRF list.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6	Internet Protocol (IPv6).
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/interface	IPv6 interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/interface/null0	Sends traffic to a Null0 Interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/global	Global
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/global/next-global-hop/{next-hop}	Sets next global hop.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/next-hop/{next-hop}	Sets the IPv6 address of the next hop in a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/next-vrf-list/{vrf},{next-hop}	Sets next VRF list.

POST URIs	Payload	Description
<base_URI>/config/running	<route-map><name>{common-def:name-string63}</name><action-rm>{action-t}</action-rm><instance>{instance-id-t}</instance></route-map>	Configures a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-hop	<next-hop-list><next-hop-addr>{inet:ipv4-address}</next-hop-addr></next-hop-list>	Configure a IPv4 next hop address.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/global	<next-global-hop><next-hop>{inet:ipv4-address}</next-hop></next-global-hop>	Sets next global hop.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip	<next-vrf-list><vrf>{string}</vrf><next-hop>{inet:ipv4-address}</next-hop></next-vrf-list>	Sets next VRF list.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/global	<next-global-hop><next-hop>{inet:ipv6-address}</next-hop></next-global-hop>	Sets next global hop.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6	<next-hop><next-hop>{inet:ipv6-address}</next-hop></next-hop>	Sets the IPv6 address of the next hop in a route-map instance.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6	<next-vrf-list><vrf>{string}</vrf><next-hop>{inet:ipv6-address}</next-hop></next-vrf-list>	Sets next VRF list.

PATCH URIs	Payload	Description
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match	<match><vrf>{common-def:vrf-name}</vrf></match>	Match condition specified as a non-default VRF. Valid values range from 0 through 4294967295.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface	<interface><ethernet>{interface:interface-type}</ethernet></interface>	Specifies an Ethernet interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface	<interface><loopback>{loopback-intf:intf-loopback-port-type}</loopback></interface>	Specifies a loopback interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface	<interface><ve>{interface:ve-type}</ve></interface>	Specifies a virtual Ethernet VLAN interface
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address	<address><acl>{ipv6-access-list:ipv6-l3-acl-policy-name}</acl></address>	Route address IPv6 ACL
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/next-hop	<next-hop><prefix-list>{ipv6-prefix-name-t}</prefix-list></next-hop>	Route next hop address IPv6 prefix-list
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address	<address><acl>{ip-access-list:l3-acl-policy-name}</acl></address>	Route address IP ACL.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface	<interface><null0>{enumeration}</null0></interface>	Sends traffic to a Null0 Interface
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/interface	<interface><null0>{enumeration}</null0></interface>	Sends traffic to a Null0 Interface

PUT URIs	Payload	Description
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/vrf	<vrf>{common-def:vrf-name}</vrf>	Match condition specified as a non-default VRF. Valid values range from 0 through 4294967295.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/ethernet	<ethernet>{interface:interface-type}</ethernet>	Specifies an Ethernet interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/loopback	<loopback>{loopback-intf:intf-loopback-port-type}</loopback>	Specifies a loopback interface.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/interface/ve	<ve>{interface:ve-type}</ve>	Specifies a virtual Ethernet VLAN interface
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address/acl	<acl>{ipv6-access-list:ipv6-l3-acl-policy-name}</acl>	Route address IPv6 ACL
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address/acl	<acl>{ip-access-list:l3-acl-policy-name}</acl>	Route address IP ACL.
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface/null0	<null0>true</null0>	Sends traffic to a Null0 Interface
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/interface/null0	<null0>true</null0>	Sends traffic to a Null0 Interface

DELETE URIs
<base_URI>/config/running/route-map/{name},{action-rm},{instance}
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/address/acl
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ipv6/next-hop/prefix-list
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/match/ip/address/acl
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface/null0
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-hop/next-hop-list/{next-hop-addr}
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/global/next-global-hop/{next-hop}
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/next-vrf-list/{vrf},{next-hop}
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/interface/null0
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/global/next-global-hop/{next-hop}
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/next-hop/{next-hop}
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ipv6/next-vrf-list/{vrf},{next-hop}

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/route-map/rm1/permit/1

### Request Body

None

### Response Body

```
<route-map xmlns="urn:brocade.com:mgmt:brocade-ip-policy" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1">
  <name>rm1</name>
  <action-rm>permit</action-rm>
  <instance>1</instance>
  <match y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match">
    <interface y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/interface">
      </interface>
    <ipv6 y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ipv6">
      <address y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ipv6/address">
        </address>
      <next-hop y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ipv6/next-hop">
        </next-hop>
      <route-source y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ipv6/route-source">
        </route-source>
      </ipv6>
    <ip y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ip">
      <address y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ip/address">
        <acl>acl2</acl>
        </address>
      <next-hop y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ip/next-hop">
        </next-hop>
      <route-source y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/ip/route-source">
        </route-source>
      </ip>
    <extcommunity y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/extcommunity">
      </extcommunity>
    <metric y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/metric">
      </metric>
    <route-type y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/route-type">
      </route-type>
    <tag y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/tag">
      </tag>
    <as-path y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/as-path">
      </as-path>
    <community y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/community">
      </community>
    <protocol y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/match/protocol">
      </protocol>
    </match>
  <set y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set">
    <ip y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip">
      <dscp y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip/dscp">
        </dscp>
      <interface y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip/interface">
        </interface>
      <next-hop y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip/next-hop">
        <next-hop-list y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip/next-hop/next-hop-list/24.24.24.2">
          <next-hop-addr>24.24.24.2</next-hop-addr>
        </next-hop-list>
      </next-hop>
    </ip>
  </set>
</route-map>
```

```

    </next-hop>
    <global y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ip/global">
  </global>
</ip>
<ipv6 y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ipv6">
  <interface y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ipv6/interface">
  </interface>
  <global y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/ipv6/global">
  </global>
</ipv6>
<extcommunity y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/extcommunity">
  <rt y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/extcommunity/rt">
  </rt>
  <soo y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/extcommunity/soo">
  </soo>
</extcommunity>
<community y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/community">
</community>
<metric y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/metric">
</metric>
<distance y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/distance">
</distance>
<tag y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/tag">
</tag>
<weight y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/weight">
</weight>
<as-path y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/as-path">
</as-path>
<automatic-tag y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/automatic-tag">
</automatic-tag>
<comm-list y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/comm-list">
</comm-list>
<dampening y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/dampening">
</dampening>
<local-preference y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/local-preference">
</local-preference>
<origin y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/origin">
</origin>
<metric-type y:self="/rest/config/running/route-map/rm1%2Cpermit%2C1/set/metric-type">
</metric-type>
</set>
</route-map>

```

The following example uses the POST option to configure an IPv4 next hop address.

## URI

http://host:80/rest/config/running/config/running/route-map/rm1/permit/1/set/ip/next-hop

## Request Body

```
<next-hop-list><next-hop-addr>{24.24.24.2}</next-hop-addr></next-hop-list>
```

## Response Body

None

The following example uses the DELETE option to remove a route map instance.

### *URI*

http://host:80/rest/config/running/route-map/rm1/permit/1

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# router/bgp

Configures, modifies, or retrieves Border Gateway Protocol (BGP) configurations.

## Resource URIs

URI	Description
<base_URI>/config/running/router/bgp	Border Gateway Protocol (BGP).

GET URIs	Description
<base_URI>/config/running/router/bgp	Border Gateway Protocol (BGP).
<base_URI>/config/running/router/bgp/local-as	Retrieves local AS number.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/bfd-enable	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/holdover-interval	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/interval	Configure BFD desired min transmit interval in milliseconds.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/interval/multiplier	Configure BFD detection time multiplier.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd	Enable BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/bfd-enable	Enable BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/interval	Configure BFD desired min transmit interval in milliseconds.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/interval/multiplier	Configure BFD detection time multiplier.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd	Enable BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/bfd-enable	Enable BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/holdover-interval	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/interval	Configure BFD desired min transmit interval in milliseconds.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/interval/multiplier	Configure BFD detection time multiplier.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd	Enable BFD session for the neighbor.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd/bfd-enable	Enable BFD session for the neighbor.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd/holdover-interval	BFD holdover interval configuration.

GET URIs	Description
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd/interval	Configure BFD desired min transmit interval in milliseconds.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd/interval/multiplier	Configure BFD detection time multiplier.

POST URIs	Payload	Description
<base_URI>/config/running/router	<bgp></bgp>	Enters router BGP configuration mode.
<base_URI>/config/running/router/bgp	<local-as>{unit32}</local-as>	Configures Local AS.
<base_URI>/config/running/router/bgp/neighbor	<neighbor-peer-grp><address>{string}</address><peer-group>{enumeration}</peer-group></neighbor-peer-grp>	Configures neighbor peer group.
<base_URI>/config/running/router/bgp/neighbor	<neighbor-peer-grp><address>{string}</address><peer-group>true</peer-group><remote-as>{unit32}</remote-as></neighbor-peer-grp>	Configures Remote AS for neighbor peer group.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}	<remote-as>{unit32}</remote-as>	Configures Remote AS.
<base_URI>/config/running/router/bgp/neighbor	<neighbor-addr><address>{ip-address}</address><remote-as>{unit32}</remote-as><peer-group>{group-name}</peer-group></neighbor-addr>	Configures neighbor address, remote AS, and peer group.
<base_URI>/config/running/router/bgp/neighbor	<neighbor-addr><address>{ip-address}</address><remote-as>{unit32}</remote-as></neighbor-addr>	Configures neighbor address and remote AS.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{ip-address}	<peer-group>{group-name}</peer-group>	Configures peer group.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{ip-address}/update-source	<loopback>{unit32}</loopback>	Configures loopback.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{ip-address}/next-hop-self	<next-hop-self-status>{enumeration}</next-hop-self-status>	Configures next hop self status.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{ip-address}/ebgp-multihop	<ebgp-multihop-count>{unit32}</ebgp-multihop-count>	Configures EBGp multi-hop count.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{ip-address}/update-source	<loopback>{unit32}</loopback>	Configures loopback.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/ospf	<redistribute-ospf>{enumeration}</redistribute-ospf>	Configures OSPF redistribution.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/static	<redistribute-static>{enumeration}</redistribute-static>	Configures static redistribution.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/connected	<redistribute-connected>{enumeration}</redistribute-connected>	Configures connected redistribution.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast	<vrf><vrf-name>{string}</vrf-name></vrf>	Configures VRF for address-family unicast.



POST URIs	Payload	Description
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor	<af-ipv4-neighbor-addr><address>{ip-address}</address><remote-as>{unit32}</remote-as><peer-group>{group-name}</peer-group></af-ipv4-neighbor-addr>	Configures neighbor.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor/af-ipv4-neighbor-addr/{ip-address}/update-source	<loopback>{unit32}</loopback>	Configures loopback.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor/af-ipv4-neighbor-addr/{ip-address}/next-hop-self	<next-hop-self-status>{enumeration}</next-hop-self-status>	Configures next hop self status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/neighbor/af-ipv4-neighbor-addr/{ip-address}/ebgp-multihop	<ebgp-multihop-count>{unit32}</ebgp-multihop-count>	Configures EBGp multi-hop count.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/ospf	<redistribute-ospf>{enumeration}</redistribute-ospf>	Configures OSPF redistribution.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/connected	<redistribute-connected>{enumeration}</redistribute-connected>	Configures connected redistribution.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/static	<redistribute-static>{enumeration}</redistribute-static>	Configures static redistribution.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}	<description>{string}</description>	Configures description.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast	<network><network-ipv4-address>{ip-address/mask}</network-ipv4-address></network>	Configures IPv4 unicast address family.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast	<network><network-ipv4-address>{ip-address/mask}</network-ipv4-address><weight>{unit32}</weight></network>	Configures network weight.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/shutdown	<shutdown-status>{enumeration}</shutdown-status>	Shuts down the peer group.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/neighbor/af-ipv4-neighbor-address/{ip-address}/route-map/in	<neighbor-route-map-name-direction-in>{string}</neighbor-route-map-name-direction-in>	Configures route map direction.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/bgp	<bgp></bgp>	Configures Router BGP.
<base_URI>/config/running/router/bgp/local-as	<local-as>{unit32}</local-as>	Configures local AS.
<base_URI>/config/running/router/bgp/local-as	<bgp><local-as>{unit32}</local-as></bgp>	Configures local AS.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp	<neighbor-peer-grp><address>{group-name}</address><peer-group>{enumeration}</peer-group></neighbor-peer-grp>	Configures peer group.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}	<peerGroup1><remote-as>{enumeration}</remote-as></peerGroup1>	Configures peer group Remote AS.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd	<bfd><bfd-enable>{enumerate}</bfd-enable></bfd>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd	<bfd><holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval></bfd>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd	<bfd><bfd-enable>{enumerate}</bfd-enable></bfd>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd	<bfd><holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval></bfd>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd	<bfd><bfd-enable>{enumerate}</bfd-enable></bfd>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd	<bfd><holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval></bfd>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd	<bfd><bfd-enable>{enumerate}</bfd-enable></bfd>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd	<bfd><holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval></bfd>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{address}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.

PUT URIs	Payload	Description
<base_URI>/config/running/router/bgp	<bgp></bgp>	Configures Router BGP.
<base_URI>/config/running/router/bgp/local-as	<local-as>{unit32}</local-as>	Configures local AS.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/remote-as	<remote-as>{unit32}</remote-as>	Configures remote AS.

PUT URIs	Payload	Description
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/bfd-enable	<bfd-enable>{enumerate}</bfd-enable>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/holdover-interval	<holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{address}/bfd/bfd-enable	<bfd-enable>{enumerate}</bfd-enable>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{address}/bfd/holdover-interval	<holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{address}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/bfd-enable	<bfd-enable>{enumerate}</bfd-enable>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/holdover-interval	<holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{af-ipv4-neighbor-address}/bfd/bfd-enable	<bfd-enable>{enumerate}</bfd-enable>	Enables BFD session for the neighbor.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{af-ipv4-neighbor-address}/bfd/holdover-interval	<holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{af-ipv4-neighbor-address}/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.

DELETE URIs
<base_URI>/config/running/router/bgp
<base_URI>/config/running/router/bgp/local-as
<base_URI>/config/running/router/bgp/neighbor
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp
<base_URI>/config/running/router/bgp/neighbor/peer-grps/neighbor-peer-grp/address
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/shutdown
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/network/{ip-address}

DELETE URIs
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/network/{ip-address}
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/network
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/ospf
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/connected
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/static
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/ospf
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/connected
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/static
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/bfd-enable
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/holdover-interval
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{router-bgp-neighbor-peer-grp}/bfd/interval
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/bfd-enable
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/holdover-interval
<base_URI>/config/running/router/bgp/neighbor/neighbor-ipv6-addr/{router-bgp-neighbor-ipv6-address}/bfd/interval
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/bfd-enable
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/holdover-interval
<base_URI>/config/running/router/bgp/neighbor/neighbor-addr/{router-bgp-neighbor-address}/bfd/interval
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{af-ipv4-neighbor-address}/bfd/bfd-enable
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{af-ipv4-neighbor-address}/bfd/holdover-interval
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{af-vrf-name}/neighbor/af-ipv4-neighbor-addr/{af-ipv4-neighbor-address}/bfd/interval

## Parameters

### *local-as*

Specifies the local ASN. The value can range from 1 through 4294967295.

### *always-compare-med*

Enables the device to always compare the Multi-Exit Discriminators {MEDs}.

### *compare-med-empty-aspath*

Enables comparison of Multi-Exit Discriminators {MEDs} for internal routes.

### *med-missing-as-worst*

Considers routes missing MED attributes as least desirable.

### *as-path-ignore*

Disables the comparison of the autonomous system {AS} path lengths of otherwise equal paths.

### *compare-routerid*

Enables comparison of device IDs.

### *install-igp-cost*

Enables the device to use the IGP cost instead of the default BGP4 or BGP4+ Multi-Exit Discriminator {MED} value.

### *id*

Configures Route-Reflector Cluster-ID.

*default-local-preference*

Specifies the local preference value. The value can range from 0 through 65535.

*ext-route-distance*

Specifies the EBGP distance. The value can range from 1 through 255.

*int-route-distance*

Specifies the IBGP distance. The value can range from 1 through 255.

*lcl-route-distance*

Specifies the local BGP4 and BGP4+ distance. The value can range from 1 through 255.

*as4-enable*

Enables 4-byte autonomous system number {ASN} capability.

*ebgp-btsh*

Enables BGP time to live {TTL} security hack protection {BTSH} for eBGP.

*num-as-in-path*

Configures the number of autonomous systems in the AS-PATH attribute.

*enforce-first-as*

Enforces the use of the first autonomous system {AS} path for external BGP {EBGP} routes.

*fast-external-fallover*

Resets the session if a link to an EBGP peer goes down.

*keep-alive*

Specifies the frequency in seconds with which a device sends keepalive messages to a peer. The value can range from 0 through 65535 seconds. The default value is 60 seconds.

*hold-time*

Specifies the interval in seconds that a device waits to receive a keepalive message from a peer before declaring that peer dead. The value can range from 0 through 65535 seconds. The default value is 180 seconds.

*log-dampening-debug*

Logs dampening debug messages.

*identifier*

Specifies an autonomous system number {ASN}. The value can range from 1 through 4294967295.

*peers*

Specifies the autonomous system {AS} numbers for BGP peers that will belong to the confederation. The value can range from 1 through 4294967295.

*holdover-interval*

Specifies the BFD holdover-time interval in seconds. The values can range from 1 through 30. The default value is 0.

*min-tx*

Specifies the interval a device waits to send a control packet to BFD peers. The value can range from 50 through 30000 milliseconds.

*min-rx*

Specifies the interval a device waits to receive a control packet from BFD peers. The value can range from 50 through 30000 milliseconds.

*multiplier*

Specifies the number of consecutive BFD control packets that must be missed from a BFD peer before BFD determines that the connection to that peer is not operational. The values can range from 3 through 50. The default value is 3.

*address*

Configures neighbor address.

*bgp- redistribute-internal*

Enables BGP4 route redistribution.

*redistribute-connected*

Redistributes directly connected routes.

*metric*

Configures metric for redistributed routes.

*redistribute-ospf*

Enables Open Shortest Path First {OSPF}.

*redistribute-static*

Enables Static routes.

*ebgp*

Specifies the number of EBGP paths. The value can range from 1 through 32. The default value is **all**.

*lbgp*

Specifies the number of IBGP paths for load sharing. The value can range from 1 through 32. The default value is **all**.

*use-load-sharing*

Uses the maximum IP ECMP path value.

*always-propagate*

Configures the device to reflect BGP routes that are not installed in the RTM.

*default-information-originate*

Sets the device to originate and advertise a default BGP4 or BGP4+ route.

*activate*

Allows exchange of route in the current family mode.

*enable-peer-as-check*

Disables routes advertise between peers in same AS.

*rib-route-limit*

Configures limit BGP rib count in routing table.

*half-time*

Specifies the number of minutes after which the route penalty becomes half its value. The value can range from 1 through 45 minutes. The default time is 15 minutes.

*reuse-value*

Specifies the minimum penalty below which the route becomes usable again. The value can range from 1 through 20000. The default value is 750.

*start-suppress-time*

Specifies the maximum penalty above which the route is suppressed by the device. The value can range from 1 through 20000. The default value is 2000.

*max-suppress-time*

Specifies the maximum number of minutes a route can be suppressed by the device. The default value is 40.

*default-metric*

Specifies the metric value. The value can range from 0 through 4294967295. The default value is 1.

*update-time*

Configures IGP route update interval.

*metric*

Configures metric for redistributed routes.

*route-map*

Route map reference.

*bgp-redistribute-internal*

Allows redistribution of IBGP routes into IGP.

*route-map*

Specifies the route map name.

*aggregate-ip-prefix*

Specifies the IPv4 address.

*network-ipv6-address*

Specifies the IPv6 address.

*advertise-map*

Specifies a route map to be consulted.

*as-set*

Sets the device to aggregate AS-path information.

*attribute-map*

Specifies a route map to be consulted.

*summary-only*

Prevents the device from advertising more-specific routes contained within the aggregate route.

*suppress-map*

Specifies a route map to be consulted.

*ibgp*

Configures the IBGP distance.

*multi-as*

Enables load sharing of paths from different neighboring autonomous systems.

*network-ipv4-address*

Configures the IP address.

*weight*

Configures the weight to be added to routes in this network.

*backdoor*

Changes administrative distance of the route to this network from the EBGP administrative distance.

*allowas-in*

Disables the AS\_PATH check function for routes learned from a specified neighbor location so that BGP does not reject routes that contain the recipient BGP speaker's AS number.

*static-network-address*

Configures the static network address.

*auto-shutdown-new-neighbors*

Automatically shuts down new neighbors.

*activate*

Allows exchange of routes in the current family mode.

*additional-paths*

Enables the advertisement of additional paths for BGP neighbors. Possible configurations are:

**receive**

Enables the BGP to receive additional paths from BGP neighbors.

**send**

Enable the BGP to send additional paths to BGP neighbors.

*advertise*

Applies filters for the advertisement of additional paths for BGP neighbors. Possible configurations are:

**all**

Advertises all BGP additional paths with a unique next hop.

**best**

Advertises the additional paths that the device selects as best paths. You can specify the number of best paths advertised. The value can range from 1 through 5.

*all*

Configures a route reflector {RR} to accept all route targets {RTs}.

*route-reflector-client*

Enables a neighbor to be a route-reflector client.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.





```

    </multipath>
    <dampening y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/dampening">
    </dampening>
    <table-map y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/table-map">
    </table-map>
    <graceful-restart y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/graceful-
restart">
    </graceful-restart>
    </unicast>
  </ipv4>
  <ipv6 y:self="/rest/config/running/router/bgp/address-family/ipv6">
    <unicast y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast">
      <default-vrf-selected>true</default-vrf-selected>
      <redistribute y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/redistribute">
        <bgp y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/redistribute/bgp">
        </bgp>
        <connected y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/redistribute/
connected">
        </connected>
        <ospf y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/redistribute/ospf">
          <match y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/redistribute/
ospf/match">
          </match>
          </ospf>
          <static y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/redistribute/
static">
          </static>
          </redistribute>
          <neighbor y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor">
          </neighbor>
          <maximum-paths y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/maximum-
paths">
          </maximum-paths>
          <multipath y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/multipath">
          </multipath>
          <dampening y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/dampening">
          </dampening>
          <table-map y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/table-map">
          </table-map>
          <graceful-restart y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/graceful-
restart">
          </graceful-restart>
          </unicast>
        </ipv6>
        <evpn y:self="/rest/config/running/router/bgp/address-family/evpn">
        </evpn>
      </address-family>
    </bgp>

```

The following is an example of the POST operation to configure neighbor.

## URI

http://host:80/rest/config/running/router/bgp/neighbor

## Request Body

```

<neighbor-peer-grp>
  <address>peerGroup1</address>
  <peer-group>true</peer-group>
</neighbor-peer-grp>

```

## Response Body

None

The following is an example of the DELETE to remove router BGP configuration.

### *URI*

http://host:80/rest/config/running/router/bgp

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# router/bgp/bfd

Configures, modifies, or retrieves Bidirectional Forwarding Detection (BFD) global parameters for Border Gateway Protocol (BGP).

## Resource URIs

URI	Description
<base_URI>/config/running/router/bgp/bfd	Configures BFD global parameters for BGP.

GET URIs	Description
<base_URI>/config/running/router/bgp/bfd	Set BFD global parameters for BGP.
<base_URI>/config/running/router/bgp/bfd/holdover-interval	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/bfd/interval	Configure BFD desired min transmit interval in milliseconds.
<base_URI>/config/running/router/bgp/bfd/interval/multiplier	Configure BFD detection time multiplier.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/bgp/bfd	<bfd><holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval></bfd>	BFD holdover interval configuration.
<base_URI>/config/running/router/bgp/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.

PUT URIs	Payload	Description
<base_URI>/config/running/router/bgp/bfd/holdover-interval	<holdover-interval>{bfd:bfd-holdover-interval}</holdover-interval>	Configures BFD holdover interval.
<base_URI>/config/running/router/bgp/bfd/interval	<interval><min-tx>{bfd-tx-interval-type}</min-tx><min-rx>{bfd-rx-interval-type}</min-rx><multiplier>{bfd-multiplier-type}</multiplier></interval>	Configures transit intervals and detection time multiplier.

DELETE URIs
<base_URI>/config/running/router/bgp/bfd/interval
<base_URI>/config/running/router/bgp/bfd/holdover-interval

## Parameters

*min-tx*

BFD desired minimum transmit interval in milliseconds.

*min-rx*

BFD desired minimum receive interval in milliseconds.

*multiplier*

BFD detection time multiplier

*bfd-holdover-interval*

BFD holdover interval.

## Usage Guidelines

GET, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the BFD configuration details.

### *URI*

http://host:80/rest/config/running/router/bgp/bfd

### *Request Body*

None

### *Response Body*

```
<bfd xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/bgp/bfd">
  <interval xmlns="urn:brocade.com:mgmt:brocade-bfd" y:self="/rest/config/running/router/bgp/bfd/interval">
    </interval>
  </bfd>
```

The following example uses the POST option to configure BFD.

### *URI*

http://host:80/rest/config/running/router

### *Request Body*

```
<bgp><bfd></bfd></bgp>
```

### *Response Body*

None

The following example uses the DELETE option to remove the configuration.

### *URI*

http://host:80/rest/config/running/router/bgp/bfd

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# router/ospf

Configures, modifies, or retrieves Open Shortest Path First (OSPF) configurations.

## Resource URIs

URI	Description
<base_URI>/config/running/router/ospf	Open Shortest Path First (OSPF).

GET URIs	Description
<base_URI>/config/running/router/ospf	Retrieves OSPF configuration details.
<base_URI>/config/running/router/ospf/{vrf-name}	Retrieves OSPF configuration details for a particular VRF.
<base_URI>/config/running/router/ospf/{vrf-name}/database-overflow-interval	Retrieves database overflow interval.
<base_URI>/config/running/router/ospf/{vrf-name}/default-information-originate	Retrieves default route information
<base_URI>/config/running/router/ospf/{vrf-name}/default-passive-interface	Marks all OSPF interfaces passive by default.
<base_URI>/config/running/router/ospf/{vrf-name}/default-metric	Specifies the OSPF routing protocol metric value.
<base_URI>/config/running/router/ospf/{vrf-name}/external-lsdb-limit	Retrieves External Link State Database limit.
<base_URI>/config/running/router/ospf/{vrf-name}/log	Enables logging for OSPFv3 activities.
<base_URI>/config/running/router/ospf/{vrf-name}/metric-type	Displays Metric type (Type 1 or Type 2).
<base_URI>/config/running/router/ospf/{vrf-name}/neighbor/{neighbor-addr}	Displays non-broadcast neighbor IP Address in the format A.B.C.D.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute	Enables route redistribution.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/connected	Redistributes directly connected routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/connected/route-map	Redistributes directly connected routes and specifies a route map to be consulted before a route is added to the routing table.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/static	Redistributes static routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/static/route-map	Redistributes static routes and specifies a route map to be consulted before a route is added to the routing table.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/bgp	Redistributes BGP routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/bgp/route-map	Redistributes BGP routes and specifies a route map to be consulted before a route is added to the routing table.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/ospf	Redistributes OSPF routes.
<base_URI>/config/running/router/ospf/{vrf-name}/area/{area-id}	Displays the OSPF Router Area ID.
<base_URI>/config/running/router/ospf/{vrf-name}/auto-cost	Calculates OSPF interface cost according to bandwidth.
<base_URI>/config/running/router/ospf/{vrf-name}/distance/{route-type}	Configures an administrative distance value for OSPF routes.
<base_URI>/config/running/router/ospf/{vrf-name}/distribute-list	Prevents routes from being learnt by OSPF.
<base_URI>/config/running/router/ospf/{vrf-name}/distribute-list/route-map	Creates a route-map distribution list.
<base_URI>/config/running/router/ospf/{vrf-name}/distribute-list/route-map/in	Creates a distribution list for an inbound route map.

GET URIs	Description
<base_URI>/config/running/router/ospf/{vrf-name}/max-metric	Retrieves Stub Router Advertisement.
<base_URI>/config/running/router/ospf/{vrf-name}/max-metric/router-lsa	Retrieves the maximum metric advertisement in the Router.
<base_URI>/config/running/router/ospf/{vrf-name}/summary-address/{sum-address},{sum-address-mask}	Retrieves IP address summaries information.
<base_URI>/config/running/router/ospf/{vrf-name}/timers	Retrieves routing timers information.
<base_URI>/config/running/router/ospf/{vrf-name}/maximum-paths	Changes the maximum number of OSPF shared paths.
<base_URI>/config/running/router/ospf/{vrf-name} /graceful-restart/	Retrieves graceful restart information.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/helper-disable	Disables graceful restart helper capability.
<base_URI>/config/running/router/ospf/{vrf-name}/nonstop-routing	Enables nonstop-routing (NSR).
<base_URI>/config/running/router/ospf/{vrf-name}/bfd	Retrieves information on BFD for OSPFv2 on all OSPFv2 enabled interfaces
<base_URI>/config/running/router/ospf/{vrf-name}/bfd/bfd-enable	Enables BFD
<base_URI>/config/running/router/ospf/{vrf-name}/bfd/holdover-interval	Retrieves BFD holdover-interval.

POST URIs	Payload	Description
<base_URI>/config/running/router/ospf/{vrf-name}/database-overflow-interval	<database-overflow-interval>(unit32)</database-overflow-interval>	Configures database overflow interval.
<base_URI>/config/running/router/ospf/{vrf-name}/default-passive-interface	<default-passive-interface>{enumeration}</default-passive-interface>	Configures default passive interface.
<base_URI>/config/running/router/ospf/{vrf-name}/default-metric	<default-metric>(unit32)</default-metric>	Configures default metric value.
<base_URI>/config/running/router/ospf/{vrf-name}/neighbor	<neighbor><neighbor-addr>(ip-address)</neighbor-addr></neighbor>	Configures neighbor.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/ospf/{vrf-name}/default-information-originate	<default-information-originate><metric>(unit32)</metric><metric-type>(string)</metric-type> <route-map>(string)</route-map></default-information-originate>	Originates default-information.
<base_URI>/config/running/router/ospf/{vrf-name}/database-overflow-interval	<database-overflow-interval>(unit32)</database-overflow-interval>	Configures the time interval at which the device checks to see if the overflow condition has been eliminated.
<base_URI>/config/running/router/ospf/default-vrf/default-passive-interface	<default-passive-interface>{enumeration}</default-passive-interface>	Marks all OSPF interfaces passive by default.
<base_URI>/config/running/router/ospf/{vrf-name}/external-lsdb-limit	<external-lsdb-limit>(unit32)</external-lsdb-limit>	Configures the maximum size of the external LSDB.
<base_URI>/config/running/router/ospf/default-vrf/neighbor/	<neighbor><neighbor-addr>(ip-address)</neighbor-addr></neighbor>	Configures the IPv4 address of the neighbor.
<base_URI>/config/running/router/ospf/default-vrf/redistribute	<redistribute><connected></connected></redistribute>	Redistributes directly connected routes.
<base_URI>/config/running/router/ospf/default-vrf/redistribute	<redistribute><static></static></redistribute>	Enables Static routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute	<redistribute><bgp></bgp></redistribute>	Enables BGP routes.



PATCH URIs	Payload	Description
<base_URI>/config/running/router/ospf/{vrf-name}/area	<area><area-id>(unit32)</area-id></area>	Configures the area address.
<base_URI>/config/running/router/ospf/{vrf-name}/area	<area><area-id>(unit32)</area-id><nssa><nssa-value>(unit32)</nssa-value></nssa></area>	Configures an NSSA area.
<base_URI>/config/running/router/ospf/{vrf-name}/auto-cost	<auto-cost ><reference-bandwidth>ref-bandwidth>(unit32)</ref-bandwidth></reference-bandwidth></auto-cost>	Configures the reference bandwidth in Mbps.
<base_URI>/config/running/router/ospf/{vrf-name}/auto-cost	<auto-cost ><reference-bandwidth><use-active-ports></use-active-ports></reference-bandwidth></auto-cost>	When set, any dynamic change in bandwidth immediately affects the cost of OSPF routes. This parameter enables cost calculation for currently active ports only.
<base_URI>/config/running/router/ospf/{vrf-name}/distance	<distance><route-type>{enumeration}</route-type><dist-value>(unit32)</dist-value></distance>	Sets the route-type and distance value.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart	<graceful-restart><graceful-restart-enable>{enumeration}</graceful-restart-enable></graceful-restart>	Enables the OSPF Graceful Restart (GR) capability.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart	<graceful-restart><helper-disable>{enumeration}</helper-disable></graceful-restart>	Disables the GR helper capability.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart	<graceful-restart><restart-time>(unit32)</restart-time></graceful-restart>	Specifies the maximum restart wait time, in seconds, advertised to neighbors.
<base_URI>/config/running/router/ospf/{vrf-name}	<ospf><nonstop-routing>{enumeration}</nonstop-routing></ospf>	Enables nonstop-routing (NSR).
<base_URI>/config/running/router/ospf/{vrf-name}/bfd	<bfd><bfd-enable>{enumeration}</bfd-enable></bfd>	Configures BFD for OSPFv2 on all OSPFv2 enabled interfaces
<base_URI>/config/running/router/ospf/{vrf-name}/bfd	<bfd><holdover-interval>{uint8}</holdover-interval></bfd>	Sets holdover BFD for OSPFv2 on all OSPFv2 enabled interfaces

PUT URIs	Payload	Description
<base_URI>/config/running/router/ospf/{vrf-name}/default-information-originate	<default-information-originate><metric>(unit32)</metric><metric-type>(string)</metric-type> <route-map>(string)</route-map></default-information-originate>	Originates default-information.
<base_URI>/config/running/router/ospf/default-vrf/database-overflow-interval	<database-overflow-interval>(unit32)</database-overflow-interval>	Configures the time interval at which the device checks to see if the overflow condition has been eliminated.
<base_URI>/config/running/router/ospf/default-vrf/default-passive-interface	<default-passive-interface>{enumeration}</default-passive-interface>	Marks all OSPF interfaces passive by default.
<base_URI>/config/running/router/ospf/{vrf-name}/default-metric	<default-metric>(unit32)</default-metric>	Configures default metric value.
<base_URI>/config/running/router/ospf/{vrf-name}/external-lsdb-limit	<external-lsdb-limit>(unit32)</external-lsdb-limit>	Configures the maximum size of the external LSDB.
<base_URI>/config/running/router/ospf/{vrf-name}/log	<log><all>{enumeration}</all></log>	Configures logging.
<base_URI>/config/running/router/ospf/{vrf-name}/log	<log><database>{enumeration}</database></log>	Configures database logging.
<base_URI>/config/running/router/ospf/{vrf-name}/log	<log><retransmit>{enumeration}</retransmit></log>	Configures retransmission logging.

PUT URIs	Payload	Description
<base_URI>/config/running/router/ospf/{vrf-name}/log	<log><adjacency></adjacency></log>	Configures adjacency logging.
<base_URI>/config/running/router/ospf/default-vrf/neighbor	<neighbor><neighbor-addr>(ip-address)</neighbor-addr></neighbor>	Configures the IPv4 address of the neighbor.
<base_URI>/config/running/router/ospf/default-vrf/redistribute	<redistribute><connected></connected></redistribute>	Redistributes directly connected routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute	<redistribute><static></static></redistribute>	Enables Static routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute	<redistribute><bgp></bgp></redistribute>	Enables BGP routes.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/graceful-restart-enable	<graceful-restart-enable>{enumeration}</graceful-restart-enable>	Enables the OSPF Graceful Restart (GR) capability.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/helper-disable	<helper-disable>{enumeration}</helper-disable>	Disables the GR helper capability.
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/restart-time	<restart-time>(unit32)</restart-time>	Specifies the maximum restart wait time, in seconds, advertised to neighbors.
<base_URI>/config/running/router/ospf/{vrf-name}/bfd/bfd-enable	<bfd-enable>{enumeration}</bfd-enable>	Enables BFD
<base_URI>/config/running/router/ospf/{vrf-name}/bfd/holdover-interval	<holdover-interval>{uint8}</holdover-interval>	Sets BFD Holdover Interval.

DELETE URIs
<base_URI>/config/running/router/ospf/{vrf-name}/default-information-originate
<base_URI>/config/running/router/ospf/{vrf-name}/database-overflow-interval
<base_URI>/config/running/router/ospf/{vrf-name}/default-passive-interface
<base_URI>/config/running/router/ospf/{vrf-name}/default-metric
<base_URI>/config/running/router/ospf/{vrf-name}/external-lsdb-limit
<base_URI>/config/running/router/ospf/{vrf-name}/log
<base_URI>/config/running/router/ospf/{vrf-name}/neighbor
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute
<base_URI>/config/running/router/ospf/{vrf-name}/area/
<base_URI>/config/running/router/ospf/{vrf-name}/distance
<base_URI>/config/running/router/ospf/{vrf-name}/auto-cost
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/graceful-restart-enable
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/helper-disable
<base_URI>/config/running/router/ospf/{vrf-name}/graceful-restart/restart-time
<base_URI>/config/running/router/ospf/{vrf-name}/nonstop-routing
<base_URI>/config/running/router/ospf/{vrf-name}/bfd/bfd-enable
<base_URI>/config/running/router/ospf/{vrf-name}/bfd/holdover-interval

## Parameters

*vrf*

Specifies the VRF name.

*database-overflow-interval*

Specifies the time interval at which the device checks to see if the overflow condition has been eliminated. The value can range from 0 through 86400 seconds. The default value is 0.

*route-map*

Specifies the name of a route map.

*default-metric*

Specifies the OSPF routing protocol metric value. The value can range from 1 through 65535.

*external-lsdb-limit*

Specifies the maximum size of the external LSDB. The maximum allowed value is 14913080.

*neighbor-addr*

Specifies the IPv4 address of the neighbor.

*area-id*

Specifies the area address in dotted decimal format (A.B.C.D) or in decimal format.

*nssa*

Specifies an NSSA area.

*default-information-originate*

Originates default-information.

*ref-bandwidth*

Specifies the reference bandwidth in Mbps. The value can range from 1 through 4294967.

*use-active-ports*

When set, any dynamic change in bandwidth immediately affects the cost of OSPF routes. This parameter enables cost calculation for currently active ports only.

*route-type*

Sets the route-type. Supported configurations are:

*external-lsa-val*

Specifies the metric value. The value can range from 1 through 16777214 (0x00001 -0x00FFFFFFE). The default value is 16711680 (0x00FF0000).

*summary-lsa-val*

Specifies the summary metric value. The value can range from 1 through 16777214 (0x00001 - 0x00FFFFFFE). The default value is 16711680 (0x00FF0000).

*ptp*

Advertises maximum metric in Router LSA for PTP links.

*stub*

Advertises maximum metric in Router LSA for stub links.

*transit*

Advertises maximum metric in Router LSA for transit links.

*sum-address*

Specifies the IP address for the summary route representing all the redistributed routes in dotted decimal format.

*sum-address-mask*

Specifies the IP mask for the summary route representing all the redistributed routes in dotted decimal format.

*lsa-group-pacing*

Specifies the interval at which OSPF LSAs are collected into a group and refreshed, check-summed, or aged out by the OSPF process. The values can range from 10 through 1800 seconds. The default value is 240 seconds.

*init-delay*

Specifies the initial SPF calculation delay. The values can range from 0 through 60000 milliseconds. The default value is 0 milliseconds.

*hold-time*

Specifies the minimum hold time between two consecutive SPF calculations. The values can range from 0 through 60000 milliseconds. The default value is 5000 milliseconds.

*max-hold-time*

Specifies the maximum wait time between two consecutive SPF calculations. The values can range from 0 through 60000 milliseconds. The default value is 10000 milliseconds.

*graceful-restart-enable*

Enables the OSPF Graceful Restart (GR) capability.

*helper-disable*

Disables the GR helper capability.

*restart-time*

Specifies the maximum restart wait time, in seconds, advertised to neighbors. The value can range from 10 through 1800 seconds. The default value is 120 seconds.

*external-lsa-val-onstartup*

Configures the external LSA value on startup.

*summary-lsa-val-onstartup*

Configures the summary LSA value on startup.

*nonstop-routing*

Enables nonstop-routing (NSR).

*holdover-interval*

Holdover interval for BFD. Range 0-20 seconds. Default is 0.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the BFD configuration details.

### URI

http://host:80/rest/config/running/router/ospf/default-vrf/bfd

### Request Body

None

### Response Body

```
<bfd xmlns="urn:brocade.com:mgmt:brocade-ospf" xmlns:y="" y:self="/rest/config/running/router/ospf/default-vrf/bfd"> <bfd-enable>true</bfd-enable> </bfd>
```

The following is an example of the PATCH operation to enable BFD for OSPF.

### URI

http://host:80/rest/config/running/router/ospf/default-vrf/bfd

### Request Body

```
<bfd><bfd-enable>true</bfd-enable></bfd>
```

### Response Body

None

The following is an example of the DELETE operation to remove the prefix-list configuration.

### URI

http://host:80/rest/config/running/router/ospf/default-vrf/bfd

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

## rule/{rule-name}/action

Creates role-based access control (RBAC) permissions associated with a role.

### Resource URIs

URI	Description
<base_URI>/config/running/rule	Creates RBAC associated with a role.

### Parameters

*index*

Specifies a numeric identifier for the rule.

**action**

Specifies whether the user is accepted or rejected while attempting to execute the specified command.

**operation**

Specifies the type of operation permitted.

**role**

Specifies the name of the role.

**command**

Specifies the command for which access is defined.

### Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/config/runnin/rule/5

### Request Body

None

### Response Body

```
<rule xmlns=""urn:brocade.com:mgmt:brocade-aaa"" xmlns:y=""http://brocade.com/ns/rest"" y:self=""/rest/
config/running/rule/5"">
  <index>5</index>
  <action>reject</action>
  <operation>read-write</operation>
  <role>testRole</role>
  <command y:self=""/rest/config/running/rule/5/command"">
    <show y:self=""/rest/config/running/rule/5/command/show"">
      <running-config y:self=""/rest/config/running/rule/5/command/show/running-config"">
        </running-config>
      </show>
    </command>
  </rule>
```

The following example uses the PATCH option to modify the RBAC associated with a role.

### URI

http://host:80/rest/config/running/rule/5

### Request Body

```
<rule>
  <index>5</index>
  <action>reject</action>
  <operation>read-write</operation>
  <role>testRole</role>
</rule>
```

### Response Body

None

The following example uses the DELETE option to delete the RBAC associated with a role.

### URI

http://host:80/rest/config/running/rule/5

### Request Body

None

rule/{rule-name}/action

## *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.



# sflow

Configures, modifies, or retrieves sFlow configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/sflow	sFlow configuration.

GET URIs	Description
<base_URI>/config/running/sflow	sFlow configuration.
<base_URI>/config/running/sflow/enable	Retrieves if sFlow is enabled globally or not.
<base_URI>/config/running/sflow/source-interface	Retrieves sFlow source IP interface.
<base_URI>/config/running/sflow//source-interface/interface-name	Retrieves the sFlow interface information.
<base_URI>/config/running/sflow/collector/{collector-ip-address}, {collector-port-number},{use-vrf}	Retrieves sFlow collector configuration.
<base_URI>/config/running/sflow/polling-interval	Retrieves interface counter polling interval details.
<base_URI>/config/running/sflow/sample-rate	Retrieves interface sampling rate.

POST URIs	Payload	Description
<base_URI>/config/running/sflow	<collector><collector-ip-address>[inet:ip-address]</collector-ip-address><collector-port-number>{uint32}</collector-port-number><use-vrf>{common-def:vrf-name}</use-vrf></collector>	Configures sFlow collector.

PATCH URIs	Payload	Description
<base_URI>/config/running/sflow	<sflow><enable>true</enable></sflow>	Enables sFlow.
<base_URI>/config/running/sflow/source-interface	<source-interface><interface-type>{source-interface-type}</interface-type><interface-name>[loopback:intf-loopback-port-type]</interface-name></source-interface>	Configures sFlow source interface.
<base_URI>/config/running/sflow	<sflow><polling-interval>{uint32}</polling-interval></sflow>	Configures sFlow polling interval.
<base_URI>/config/running/sflow	<sflow><sample-rate>{uint32}</sample-rate></sflow>	Configures sFlow sampling rate.

PUT URIs	Payload	Description
<base_URI>/config/running/sflow	<sflow><enable>true</enable></sflow>	Enables sFlow.
<base_URI>/config/running/sflow/source-interface	<source-interface><interface-type>{source-interface-type}</interface-type><interface-name>[loopback:intf-loopback-port-type]</interface-name></source-interface>	Configures sFlow source interface.
<base_URI>/config/running/sflow/polling-interval	<sflow><polling-interval>{uint32}</polling-interval></sflow>	Configures sFlow polling interval.
<base_URI>/config/running/sflow/sample-rate	<sflow><sample-rate>{uint32}</sample-rate></sflow>	Configures sFlow sampling rate.

DELETE URIs
<base_URI>/config/running/sflow
<base_URI>/config/running/sflow/source-interface
<base_URI>/config/running/sflow/collector/{collector-ip-address},{collector-port-number},{use-vrf}
<base_URI>/config/running/sflow/polling-interval
<base_URI>/config/running/sflow/sample-rate

## Parameters

### *collector-ip-address*

Specifies the IP address of the sFlow collector.

### *collector-port-number*

Specifies the port number used by the sFlow collector. The value can range from 1 through 65535.

### *use-vrf*

VRF to use for sending data to the collector (default = mgmt-vrf).

### *source-ip*

Specifies the source IP address to use.

### *polling-interval*

Specifies polling interval value. The value can range from 1 through 65535. The default value is 20.

### *sample-rate*

Specifies sampling rate value. The value can range from Range is 2 to 1044480. The default value is 2048.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/sflow

### Request Body

None

### Response Body

```
<sflow xmlns="" xmlns:urn:brocade.com:mgmt:brocade-sflow"" xmlns:y=""http://brocade.com/ns/rest"" y:self=""/
rest/config/running/sflow"">
  <enable>true</enable>
  <source-interface y:self=""/rest/config/running/sflow/source-interface"">
  </source-interface>
  <collector y:self=""/rest/config/running/sflow/collector/34.1.1.2%2C6343%2Cvrf2"">
    <collector-ip-address>34.1.1.2</collector-ip-address>
    <collector-port-number>6343</collector-port-number>
    <use-vrf>vrf2</use-vrf>
  </collector>
  <collector y:self=""/rest/config/running/sflow/collector/112.1.1.2%2C6343%2Cdefault-vrf"">
    <collector-ip-address>112.1.1.2</collector-ip-address>
    <collector-port-number>6343</collector-port-number>
    <use-vrf>default-vrf</use-vrf>
  </collector>
  <collector y:self=""/rest/config/running/sflow/collector/172.22.12.83%2C6343%2Cmgmt-vrf"">
    <collector-ip-address>172.22.12.83</collector-ip-address>
    <collector-port-number>6343</collector-port-number>
    <use-vrf>mgmt-vrf</use-vrf>
  </collector>
  <collector y:self=""/rest/config/running/sflow/collector/fdd1:a123:b123:c123:34:1:1:2%2C6622%2Cvrf2"">
    <collector-ip-address>fdd1:a123:b123:c123:34:1:1:2</collector-ip-address>
    <collector-port-number>6622</collector-port-number>
    <use-vrf>vrf2</use-vrf>
  </collector>
  <collector y:self=""/rest/config/running/sflow/collector/
fdd1:a123:b123:c123:112:1:1:2%2C6343%2Cdefault-vrf"">
    <collector-ip-address>fdd1:a123:b123:c123:112:1:1:2</collector-ip-address>
    <collector-port-number>6343</collector-port-number>
    <use-vrf>default-vrf</use-vrf>
  </collector>
  <polling-interval>44</polling-interval>
  <sample-rate>456</sample-rate>
</sflow>
```

The following example uses the POST option to configure sFlow collector.

### URI

http://host:80/rest/config/running/sflow

### Request Body

```
<collector>
  <collector-ip-address>fdd1:a123:b123:c123:112:1:1:2</collector-ip-address>
  <collector-port-number>6343</collector-port-number>
  <use-vrf>default-vrf</use-vrf>
</collector>
```

### Response Body

None

The following example uses the DELETE option to remove the sFlow sampling rate.

### URI

http://host:80/rest/config/running/sflow/sample-rate

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# system-monitor

Configures, modifies, or retrieves field-replaceable unit (FRU) threshold and alert setting.

## Resource URIs

GET URIs	Description
<base_URI>/config/running/system-monitor	Retrieves FRU threshold and alert setting.
<base_URI>/config/running/system-monitor/fan	Retrieves threshold and alert setting for component: FAN.
<base_URI>/config/running/system-monitor/power	Retrieves threshold and alert setting for component: POWER SUPPLY.
<base_URI>/config/running/system-monitor/temp	Retrieves threshold and alert setting for component: TEMPERATURE SENSOR.
<base_URI>/config/running/system-monitor/cid-card	Retrieves threshold and alert setting for component: CIS-CARD.
<base_URI>/config/running/system-monitor/sfp	Retrieves threshold and alert setting for component: SFP.
<base_URI>/config/running/system-monitor/compact-flash	Retrieves threshold component: COMPACT-FLASH.
<base_URI>/config/running/system-monitor/mm	Retrieves threshold setting for component: MM.
<base_URI>/config/running/system-monitor/sfm	Retrieves threshold setting for component: SFM.
<base_URI>/config/running/system-monitor/port	Retrieves threshold, alert and action settings for Port CRC Monitoring

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor/fan/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of the Fan component.
<base_URI>/config/running/system-monitor/fan/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the Fan component.
<base_URI>/config/running/system-monitor/fan/alert/state	<state>removed</state>	Configures alerts for Fan state.
<base_URI>/config/running/system-monitor/fan/alert/action	<action>raslog</action>	Configure action to be taken.
<base_URI>/config/running/system-monitor/power/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of the Power component.
<base_URI>/config/running/system-monitor/power/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the Power component.
<base_URI>/config/running/system-monitor/power/alert/state	<state>removed</state>	Configures alerts for Power state.
<base_URI>/config/running/system-monitor/power/alert/action	<action>raslog</action>	Configure action to be taken.
<base_URI>/config/running/system-monitor/temp/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of the Temperature component.
<base_URI>/config/running/system-monitor/temp/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the Temperature component.
<base_URI>/config/running/system-monitor/cid-card/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of the CID crash.
<base_URI>/config/running/system-monitor/cid-card/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the CID crash.
<base_URI>/config/running/system-monitor/cid-card/alert/state	<state>removed</state>	Configures alerts for CID crash state.

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor/cid-card/alert/action	<action>raslog</action>	Configure action to be taken.
<base_URI>/config/running/system-monitor/compact-flash/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of the compact flash.
<base_URI>/config/running/system-monitor/compact-flash/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the compact flash.
<base_URI>/config/running/system-monitor/MM/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of MM.
<base_URI>/config/running/system-monitor/SFM/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of SFM.
<base_URI>/config/running/system-monitor/SFM/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of SFM.

## Parameters

### *action*

Specifies the response type. Supported types are:

#### **all**

Specifies that e-mail and RASLog messaging are used.

#### **email**

Specifies that an e-mail message is sent.

#### **none**

Specifies that no message is sent.

#### **raslog**

Specifies RASLog messaging.

### *state*

Specifies the hardware state to be monitored. Supported states are:

#### **all**

Specifies that all hardware states are monitored.

#### **faulty**

Specifies that hardware is monitored for faults.

#### **inserted**

Specifies that the insertion state of hardware is monitored.

#### **none**

Specifies that no hardware states are monitored.

#### **on**

Specifies that the hardware on/off state is monitored.

#### **removed**

Specifies that the removal of hardware is monitored.

### *down-threshold*

Specifies an integer value that, when exceeded, indicates when hardware is down.

*marginal-threshold*

Specifies an integer value that, when exceeded, indicates when hardware is operating marginally.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/system-monitor

### Request Body

None

### Response Body

```
<system-monitor xmlns="urn:brocade.com:mgmt:brocade-system-monitor"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/system-monitor">
  <fan y:self="/rest/config/running/system-monitor/fan">
    <threshold y:self="/rest/config/running/system-monitor/fan/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/system-monitor/fan/alert">
      <state>removed</state>
      <action>raslog</action>
    </alert>
  </fan>
  <power y:self="/rest/config/running/system-monitor/power">
    <threshold y:self="/rest/config/running/system-monitor/power/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/system-monitor/power/alert">
      <state>removed</state>
      <action>raslog</action>
    </alert>
  </power>
  <temp y:self="/rest/config/running/system-monitor/temp">
    <threshold y:self="/rest/config/running/system-monitor/temp/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
  </temp>
  <cid-card y:self="/rest/config/running/system-monitor/cid-card">
    <threshold y:self="/rest/config/running/system-monitor/cid-card/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/system-monitor/cid-card/alert">
      <state>none</state>
      <action>none</action>
    </alert>
  </cid-card>
  <compact-flash y:self="/rest/config/running/system-monitor/compact-flash/
threshold"
  <threshold y:self="/rest/config/running/system-monitor/compact-flash/
threshold"
    <marginal-threshold>1</marginal-threshold>
    <down-threshold>0</down-threshold>
  </threshold>
  </compact-flash>
  <MM y:self="/rest/config/running/system-monitor/MM">
    <threshold y:self="/rest/config/running/system-monitor/MM/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>0</down-threshold>
```



```

    </threshold>
  </MM>
  <LineCard y:self="/rest/config/running/system-monitor/LineCard">
    <threshold y:self="/rest/config/running/system-monitor/LineCard/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/system-monitor/LineCard/alert">
      <state>none</state>
      <action>none</action>
    </alert>
  </LineCard>
  <SFM y:self="/rest/config/running/system-monitor/SFM">
    <threshold y:self="/rest/config/running/system-monitor/SFM/threshold">
      <marginal-threshold>1</marginal-threshold>
      <down-threshold>2</down-threshold>
    </threshold>
  </SFM>
</system-monitor>

```

The following example uses the PUT option to configure fan marginal threshold.

### URI

http://host:80/rest/config/running/system-monitor

### Request Body

```
<marginal-threshold>1</marginal-threshold>
```

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# system-monitor-mail

Configures, modifies, or retrieves mail settings.

## Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/fru	FRU mail settings. Refer to system-monitor-mail/fru for more information.
<base_URI>/config/running/system-monitor-mail/interface	Interface mail settings. Refer to system-monitor-mail/interface for more information.
<base_URI>/config/running/system-monitor-mail/relay	Relay IP mail settings. Refer to system-monitor-mail/relay for more information.
<base_URI>/config/running/system-monitor-mail/security	Security mail settings. Refer to system-monitor-mail/security for more information.
<base_URI>/config/running/system-monitor-mail/sfp	SFP mail settings. Refer to system-monitor-mail/sfp for more information.

POST URI	Payload	Description
<base_URI>/config/running/system-monitor-mail	<relay><host-ip>{inet:host}</host-ip></relay>	Creates FRU email alerts.

## Parameters

*fru*

Configures FRU mail settings.

*interface*

Configures interface mail settings.

*relay*

Configures relay IP mail settings.

*security*

Configures security mail settings.

*sfp*

Configures SFP mail settings.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/system-monitor-mail

### Request Body

None

### Response Body

```
<system-monitor-mail xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/system-monitor-mail">
  <fru y:self="/rest/config/running/system-monitor-mail/fru"/>
  <sfp y:self="/rest/config/running/system-monitor-mail/sfp"/>
  <security y:self="/rest/config/running/system-monitor-mail/security"/>
  <interface y:self="/rest/config/running/system-monitor-mail/interface"/>
  <relay y:self="/rest/config/running/system-monitor-mail/relay/10.20.38.100"/>
</system-monitor-mail>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# system-monitor-mail/fru

Configures, modifies, or retrieves field-replaceable unit (FRU) mail settings.

## Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts..
<base_URI>/config/running/system-monitor-mail/fru	FRU mail settings.

POST URI	Payload	Description
<base_URI>/config/running/system-monitor-mail/fru	<email-list><email>(string)</email></email-list>	Configures email alerts for the FRUs.

PUT URI	Payload	Description
<base_URI>/config/running/system-monitor-mail/fru/enable	<enable>true</enable>	Modifies email settings for the FRUs.

## Parameters

*email*

Specifies e-mail address for FRU alerts.

*enable*

Enables FRU e-mail alerts.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/system-monitor-mail/fru

### Request Body

None

### Response Body

```
<fru xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/system-monitor-mail/fru">
  <enable>true</enable>
```

The following example uses the PATCH option to enable FRU.

### *URI*

http://host:80/rest/config/running/system-monitor-mail

### *Request Body*

```
<system-monitor-mail><fru><enable>true</enable></fru></system-monitor-mail>
```

### *Response Body*

None

The following example uses the DELETE option to remove the FRU configuration.

### *URI*

http://host:80/rest/config/running/system-monitor-mail/fru

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# system-monitor-mail/interface

Configures, modifies, or retrieves interface mail settings.

## Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/interface	Configures email alerts for the interface.

POST URI	Payload	Description
<base_URI>/config/running/system-monitor-mail/interface	<email-list><email>(string)</email></email-list>	Configures email address for interface.

PUT URI	Payload	Description
<base_URI>/config/running/system-monitor-mail/interface/enable	<enable>true</enable>	Modifies email settings for interface.

## Parameters

*email*

Specifies e-mail address for interface alerts.

*enable*

Enables interface e-mail alerts.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/system-monitor-mail/interface

### Request Body

None

### Response Body

```
<interface xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/system-monitor-mail/interface">
  <enable>true</enable>
</interface>
```

The following example uses the PATCH option to enable the interface setting.

### URI

http://host:80/rest/config/running/system-monitor-mail

### Request Body

```
system-monitor-mail<interface><enable>true</enable></interface></system-monitor-mail>
```

### Response Body

None

The following example uses the DELETE option to remove the interface configuration.

### URI

http://host:80/rest/config/running/system-monitor-mail/interface

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.



# system-monitor-mail/relay

Configures, modifies, or retrieves relay IP mail settings.

## Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/relay	Relay IP mail settings.

## Parameters

*host-ip*

Specifies host IP address.

*domain-name*

Specifies domain server name.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/system-monitor-mail/relay

### Request Body

None

### Response Body

```
<relay xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/system-monitor-mail/relay/10.1.1.1">
  <host-ip>10.1.1.1</host-ip>
</relay>
```

The following is an example of the PATCH operation to configure the relay host.

### *URI*

http://host:80/rest/config/running/system-monitor-mail

### *Request Body*

```
<system-monitor-mail><relay><host-ip>10.1.1.1</host-ip></relay></system-monitor-mail>
```

### *Response Body*

None

The following example uses the DELETE option to remove the relay host configuration.

### *URI*

http://host:80/rest/config/running/system-monitor-mail/relay

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# system-monitor-mail/security

Configures, modifies, or retrieves security email settings.

## Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/security	Security email settings.

POST URIs	Payload	Description
<base_URI>/config/running/system-monitor-mail/security	<email-list><email>(string)</email></email-list>	Configures the security email alerts.

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor-mail/security/enable	<enable>true</enable>	Modifies the security email alerts.

## Parameters

*email*

Specifies e-mail address for security alerts.

*enable*

Enables security e-mail alerts.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/system-monitor-mail/security

### Request Body

None

### Response Body

```
<security xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/system-monitor-mail/security">
  <enable>true</enable>
</security>
```

The following example uses the PATCH option to enable security.

### URI

http://host:80/rest/config/running/system-monitor-mail

### Request Body

```
<system-monitor-mail><security><enable>true</enable></security></system-monitor-mail>
```

### Response Body

None

The following is an example of the DELETE operation to remove the security e-mail settings.

### URI

http://host:80/rest/config/running/system-monitor-mail/security

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# system-monitor-mail/sfp

Configures, modifies, or retrieves small form-factor pluggable (SFP) email settings.

## Resource URIs

URI	Description
<base_URI>/config/running/system-monitor-mail	Configures the FRU email alerts.
<base_URI>/config/running/system-monitor-mail/sfp	Configures email alerts for the SFP.

POST URIs	Payload	Description
<base_URI>/config/running/system-monitor-mail/sfp	<email-list><email>(string)</email></email-list>	Configures a new email alerts for the SFP.

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor-mail/sfp/enable	<enable>true</enable>	Modifies the SFP email alert.

## Parameters

*email*

Specifies e-mail address for SFP alerts.

*enable*

Enables sfp e-mail alerts.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### *URI*

http://host:80/rest/config/running/system-monitor-mail/sfp

### *Request Body*

None

### *Response Body*

```
<sfp xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/system-monitor-mail/sfp">
  <enable>true</enable>
</sfp>
```

The following example uses the PATCH option to enable SFP.

### *URI*

http://host:80/rest/config/running/system-monitor-mail

### *Request Body*

```
<system-monitor-mail><sfp><enable>true</enable></sfp></system-monitor-mail>
```

### *Response Body*

None

The following example uses the DELETE option to remove the SFP configuration.

### *URI*

http://host:80/rest/config/running/system-monitor-mail/sfp

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.



# tacacs-server

Configures, modifies, or retrieves TACACS+ server configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/tacacs-server	TACACS+ server.

## Parameters

### *hostname*

Specifies the IP address or domain name of the TACACS+ server. IPv4 and IPv6 addresses are supported.

### *use-vrf*

Specifies the VRF name.

### *encryption-level*

Specifies the level of encryption of the key.

### *key*

Specifies the text string that is used as the shared secret between the switch and the TACACS+ server to make the message exchange secure. The key value can range from 8 through 40 characters in length. The default key is sharedsecret.

### *port*

Specifies the authentication port. Valid values range from 0 through 65535. The default is 49.

### *protocol*

Specifies the authentication protocol. Options include CHAP and PAP. The default is CHAP.

### *retries*

Specifies the number of attempts allowed to connect to a TACACS+ server. The number of retries can range from 0 through 100. The default number of retries is 5.

### *timeout*

Specifies the time to wait for the TACACS+ server to respond. The wait time can range from 1 through 60 seconds. The default wait time is 5 seconds.

### *source-ip*

Specifies the source IP to be used for TACACS+. Source IP can be used from chassis IP and MM IP. Configuring **chassis-ip** uses chassis IP as source address. Configuring **mm-ip** uses local MM IP as source address.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/tacacs-server

### Request Body

None

### Response Body

```
<tacacs-server xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/tacacs-server">
  <host y:self="/rest/config/running/tacacs-server/host/10.20.38.100">
    <hostname>10.20.38.100</hostname>
    <use-vrf>mgmt-vrf</use-vrf>
    <port>55</port>
    <protocol>pap</protocol>
    <key>"Yf0BKEhsc83gp+kIoGMQ/g==\n"</key>
    <encryption-level>7</encryption-level>
    <retries>6</retries>
    <timeout>10</timeout>
  </host>
  <source-ip>chassis-ip</source-ip>
</tacacs-server>
```

The following is an example of the POST operation to add a new host to the TACACS+ server.

### URI

http://host:80/rest/config/running/tacacs-server

### Request Body

```
<host>
  <hostname>10.20.38.110</hostname>
</host>
```

### Response Body

None

The following is an example of the DELETE operation to remove a host name from the TACACS+ server.

### *URI*

http://host:80/rest/config/running/tacacs-server/host/10.20.38.110

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# telemetry

Configures telemetry.

## Resource URIs

URI	Description
<base_URI>/config/running/telemetry	Telemetry configuration.

GET URIs	Description
<base_URI>/config/running/telemetry	Telemetry configuration.
<base_URI>/config/running/telemetry/collector/{name}	Telemetry Collector configuration.
<base_URI>/config/running/telemetry/collector/{name}/ip	Collector IP Address Configuration.
<base_URI>/config/running/telemetry/collector/{name}/ip/port	Collector Port number.
<base_URI>/config/running/telemetry/collector/{name}/profile/{collector-profiletype},{collector-profilename}	Create a profile for Collector.
<base_URI>/config/running/telemetry/collector/{name}/activate	Activate the collector profile.
<base_URI>/config/running/telemetry/server/{use-vrf}	Server
<base_URI>/config/running/telemetry/server/{use-vrf}/transport	Service transport type; Default is tcp.
<base_URI>/config/running/telemetry/server/{use-vrf}/port	Service Port number;; Default is 50051.
<base_URI>/config/running/telemetry/server/{use-vrf}/activate	Activate the service
<base_URI>/config/running/telemetry/profile	Profile
<base_URI>/config/running/telemetry/profile/system-utilization/{name}	System Utilization profile
<base_URI>/config/running/telemetry/profile/system-utilization/{name}/interval	System profile interval
<base_URI>/config/running/telemetry/profile/system-utilization/{name}/add/{object}	Add telemetry object
<base_URI>/config/running/telemetry/profile/interface/{name}	Interface profile
<base_URI>/config/running/telemetry/profile/interface/{name}/interval	Interface profile interval
<base_URI>/config/running/telemetry/profile/interface/{name}/interface/{interface-range}	Interface range
<base_URI>/config/running/telemetry/profile/interface/{name}/add/{object}	Add telemetry object

POST URIs	Payload	Description
<base_URI>/config/running/telemetry	<collector><name>{common-def.name-string32}</name></collector>	Telemetry collector Configuration
<base_URI>/config/running/telemetry/collector/{name}	<profile><collector-profiletype>{telemetry-profile-type}</collector-profiletype><collector-profilename>{collector-profile-name-type}</collector-profilename></profile>	Adds Telemetry profile to the collector.
<base_URI>/config/running/telemetry	<server><use-vrf>{common-def.vrf-name}</use-vrf></server>	Server

POST URIs	Payload	Description
<base_URI>/config/running/telemetry/profile	<system-utilization><name>{system-profile-name-type}</name></system-utilization>	System Utilization profile
<base_URI>/config/running/telemetry/profile/system-utilization/{name}	<add><object>{system-profile-object-type}</object></add>	Add telemetry object
<base_URI>/config/running/telemetry/profile	<interface><name>{interface-profile-name-type}</name></interface>	Interface profile
<base_URI>/config/running/telemetry/profile/interface/{name}	<interface><interface-range>{phy-interface-range-cli-pattern}</interface-range></interface>	Interface range
<base_URI>/config/running/telemetry/profile/interface/{name}	<add><object>{interface-profile-object-type}</object></add>	Add telemetry object

PATCH URIs	Payload	Description
<base_URI>/config/running/telemetry/collector/{name}/ip	<ip><collector-ip-address>{inet:ipv4-address}</collector-ip-address><port>{inet:port-number}</port></ip>	Collector IP Address Configuration
<base_URI>/config/running/telemetry/collector/{name}	<collector><activate>{enumeration}</activate></collector>	Activates collector Profile.
<base_URI>/config/running/telemetry/server/{use-vrf}	<server><transport>{service-transport-type}</transport></server>	Service transport type.
<base_URI>/config/running/telemetry/server/{use-vrf}	<server><port>{service-port-type}</port></server>	Service Port number
<base_URI>/config/running/telemetry/server/{use-vrf}	<server><activate>{enumeration}</activate></server>	Activate the service.
<base_URI>/config/running/telemetry/profile/system-utilization/{name}	<system-utilization><interval>{system-profile-interval-type}</interval></system-utilization>	System profile interval
<base_URI>/config/running/telemetry/profile/interface/{name}	<interface><interval>{interface-profile-interval-type}</interval></interface>	Interface profile interval

PUT URIs	Payload	Description
<base_URI>/config/running/telemetry/collector/{name}/ip	<ip><collector-ip-address>{inet:ipv4-address}</collector-ip-address><port>{inet:port-number}</port></ip>	Collector IP Address Configuration
<base_URI>/config/running/telemetry/collector/{name}/activate	<activate>{enumeration}</activate>	Activate the collector profile
<base_URI>/config/running/telemetry/server/{use-vrf}/transport	<transport>{service-transport-type}</transport>	Service transport type; Default is tcp
<base_URI>/config/running/telemetry/server/{use-vrf}/port	<port>{service-port-type}</port>	Service Port number;; Default is 50051.
<base_URI>/config/running/telemetry/server/{use-vrf}/activate	<activate>{enumeration}</activate>	Activate the service
<base_URI>/config/running/telemetry/profile/system-utilization/{name}/interval	<interval>{system-profile-interval-type}</interval>	System profile interval
<base_URI>/config/running/telemetry/profile/interface/{name}/interval	<interval>{interface-profile-interval-type}</interval>	Interface profile interval

DELETE URIs
<base_URI>/config/running/telemetry/collector/{name}
<base_URI>/config/running/telemetry/collector/{name}/ip/port
<base_URI>/config/running/telemetry/collector/{name}/profile/{collector-profiletype},{collector-profilename}
<base_URI>/config/running/telemetry/collector/{name}/activate
<base_URI>/config/running/telemetry/server/{use-vrf}
<base_URI>/config/running/telemetry/server/{use-vrf}/port
<base_URI>/config/running/telemetry/server/{use-vrf}/activate
<base_URI>/config/running/telemetry/profile/system-utilization/{name}
<base_URI>/config/running/telemetry/profile/system-utilization/{name}/interval
<base_URI>/config/running/telemetry/profile/system-utilization/{name}/add/{object}
<base_URI>/config/running/telemetry/profile/interface/{name}
<base_URI>/config/running/telemetry/profile/interface/{name}/interval
<base_URI>/config/running/telemetry/profile/interface/{name}/interface/{interface-range}
<base_URI>/config/running/telemetry/profile/interface/{name}/add/{object}

## Parameters

### *collector*

Telemetry Collector Name

### *profile*

Profile for Collector

### *collector-profiletype*

Collector profile type

### *collector-profilename*

Name of Telemetry profile to be added to the collector

### *use-vrf*

Vrf name

### *server*

Server name

### *system-utilization*

System Utilization profile

### *add*

Add telemetry object

### *object*

Object name

### *interface*

Interface profile name

### *interface-range*

Interface range

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the POST option to configure the NEW\_Collector.

### URI

http://host:80/rest/config/running/telemetry

### Request Body

```
<collector><name>NEW_collector</name><ip><collector-ip-address>10.70.12.112</collector-ip-address><port>44444</port></ip></collector>
```

### Response Body

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/telemetry

### Request Body

None

### Response Body

```
<telemetry xmlns="urn:brocade.com:mgmt:brocade-telemetry"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/telemetry">
<collector y:self="/rest/config/running/telemetry/collector/NEW_collector">
<name>NEW_collector</name> </collector>
<collector y:self="/rest/config/running/telemetry/collector/new_name"> <name>new_name</name> </
collector> <collector y:self="/rest/config/running/telemetry/collector/openconfig">
<name>openconfig</name> </collector>
<collector y:self="/rest/config/running/telemetry/collector/openconfig_new"> <name>openconfig_new</
name> </collector> <profile y:self="/rest/config/running/telemetry/profile"> <system-utilization
y:self="/rest/config/running/telemetry/profile/system-utilization/
default_system_utilization_statistics"> <name>default_system_utilization_statistics</name> </
system-utilization> <interface y:self="/rest/config/running/telemetry/profile/interface/
default_interface_statistics"> <name>default_interface_statistics</name> </interface> </
profile></telemetry>
```

The following example uses the DELETE option to delete the NEW\_collector.

### *URI*

http://host:80/rest/config/running/telemetry//collector/NEW\_collector

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.



# username

Configures, modifies, or retrieves configuration of local users.

## Resource URIs

URI	Description
<base_URI>/config/running/username	Configuration of local users.

## Parameters

*name*

Specifies the user name.

*desc*

Specifies the account description.

**enable**

Enables or disables the user account. Configuring **true** enables the user account, default value is set to true. Configuring **false** disables user account.

*encryption-level*

Specifies the level of encryption of the password. Supported configurations are 0 and 7. Configuring 0 sets the password as CLEAR-TEXT. Configuring 7 sets the password as encrypted.

*expire*

Specifies the date until when the password will remain valid after being updated. The default value is set to "never".

*password*

Specifies the password of the user.

*role*

Specifies the role of the user.

*access-time*

Restricts the hours during the day that the user may be logged in. By default, users are granted 24 hour access. Time values are given in 24 hour format. For example, to restrict access to the daily work schedule, use access-time 0800 to 1800.

*end-time*

Specifies the end-time for a user's session.

## Usage Guidelines

GET, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the username details.

### URI

http://host:80/rest/config/running/username

### Request Body

None

### Response Body

```
<username xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/username/admin">
  <name>admin</name>
</username>
<username xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/username/user">
  <name>user</name>
</username>
```

The following is an example of the DELETE operation to remove a user name.

### URI

http://host:80/rest/config/running/username/user3

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# vlan

Configures a VLAN.

## Resource URIs

URI	Description
<base_URI>/config/running/vlan	Configures a VLAN.

GET URIs	Description
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp	Configures IGMP.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	Configures IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/version	Enables IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/last-member-query-interval	Configures the IGMP snooping last-member query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-interval	Configures the IGMP snooping query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-max-response-time	Configures the maximum response time for IGMP snooping queries.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/enable	Enables IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/fast-leave	Enables IGMP snooping fast-leave processing for a VLAN. This allows the removal of an interface from the forwarding table without sending out group-specific queries to the interface.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/querier	Configures the IGMP snooping querier on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/querier/enable	Activates the IGMP snooping querier on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/mrouter	Configures a VLAN port member to be a multicast router interface.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/last-member-query-count	Displays the last member query count for a routed port.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/startup-query-interval	Startup Query Interval.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/startup-query-count	Displays the IGMP startup query count for an interface.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/static-group/{igmps-mcast-address},{igmps-interface},{igmps-if-type},{value}	Configures an interface in a VLAN as a static member of a multicast group.

POST URIs	Payload	Description
<base_URI>/config/running/	<vlan><name>(unit32)</name></vlan>	Creates a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/mrouter	<interface><igmps-if-type>ethernet</igmps-if-type><value>{string}</value></interface>	Configures a VLAN port member to be a multicast router interface.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<static-group><mcast-address>{inet:ipv4-address}</mcast-address><interface>{enumeration}</	Configures an interface in a VLAN as a static member of a multicast group.

POST URIs	Payload	Description
	interface<igmps-if-type>[enumeration]</igmps-if-type><value>[string-type]</value></static-group>	
<base_URI>/config/running/vlan/11/ip/igmp/snooping/mrouter	<interface><igmps-if-type>ethernet</igmps-if-type><value>[string]</value></interface>	Configures a VLAN port member to be a multicast router interface.

PUT URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-num}/router-interface/Ve	<Ve>[unit32]</Ve>	Creates a router VLAN interface.
<base_URI>/config/running/vlan/{vlan-num}/statistics	<statistics>[enum]</statistics>	Enables statistics.
<base_URI>/config/running/vlan/{vlan-num}/description	<description>[string]</description>	Adds the VLAN description.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/version	<version>[unit32]</version>	Configures the IGMP snooping version.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/last-member-query-interval	<last-member-query-interval>[unit32]</last-member-query-interval>	Configures the IGMP snooping last-member query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-interval	<query-interval>[unit32]</query-interval>	Configures the IGMP snooping query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-max-response-time	<query-max-response-time>[unit32]</query-max-response-time>	Configures the maximum response time for IGMP snooping queries.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/enable	<enable>[enumeration]</enable>	Enables IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/fast-leave	<fast-leave>[enumeration]</fast-leave>	Enables IGMP snooping fast-leave processing for a VLAN. This allows the removal of an interface from the forwarding table without sending out group-specific queries to the interface.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/querier/enable	<enable>[enumeration]</enable>	Configures the IGMP snooping querier on a VLAN.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/last-member-query-count	<last-member-query-count>[lmqc-type]</last-member-query-count>	Sets the last member query count for a routed port.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/startup-query-interval	<startup-query-interval>[sqi-type]</startup-query-interval>	Sets the IGMP startup query interval for an interface.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/startup-query-count	<startup-query-count>[sqc-type]</startup-query-count>	Sets the IGMP startup query count for an interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<snooping><version>[unit32]</version></snooping>	Configures the IGMP snooping version.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<snooping><last-member-query-interval>[unit32]</last-member-query-interval></snooping>	Configures the IGMP snooping last-member query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<snooping><query-interval>[unit32]</query-interval></snooping>	Configures the IGMP snooping query interval.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<snooping><query-max-response-time>[unit32]</query-max-response-time></snooping>	Configures the maximum response time for IGMP snooping queries.

PATCH URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<snooping><enable>{enumeration}</enable></snooping>	Enables IGMP snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping	<snooping><fast-leave>{enumeration}</fast-leave></snooping>	Enables IGMP snooping fast-leave processing for a VLAN. This allows the removal of an interface from the forwarding table without sending out group-specific queries to the interface.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping	<snooping><last-member-query-count>{lmqc-type}</last-member-query-count></snooping>	Sets the last member query count for a routed port.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping	<snooping><startup-query-interval>{sqi-type}</startup-query-interval></snooping>	Sets the IGMP startup query interval for an interface.
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping	<snooping><startup-query-count>{sqc-type}</startup-query-count></snooping>	Sets the IGMP startup query count for an interface.

DELETE URIs
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/version
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/last-member-query-interval
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-interval
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/query-max-response-time
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/enable
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/fast-leave
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/querier/enable
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/mrouter/interface/{interface-type},{interface-name}
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/last-member-query-count
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/startup-query-interval
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/startup-query-count
<base_URI>/config/running/vlan/{name}/ip/igmp/snooping/static-group/{igmps-mcast-address},{igmps-interface},{igmps-if-type},{value}

## Parameters

### *last-member-query-interval*

Specifies the the IGMP snooping last-member query interval time in milliseconds. Range is from 100 through 25500 milliseconds. The default is 1000.

### *query-interval*

Specifies the IGMP query interval time in seconds. Range is from 1 through 18000 seconds. The default is 125.

### *query-max-response-time*

Specifies the maximum response time for IGMP queries for an interface in seconds. Range is from 1 through 25 seconds. The default is 10.

### *version*

Specifies the IGMP version number on a device: 1, 2, or 3. Version 2 is the default.

### *last-member-query-count*

The last member query count for a routed port. The last member query count is used while processing the leave message. The range is from 1 through 10. The default is 2

*startup-query-interval*

The IGMP startup query interval for an interface. Range is from 1second through 450 seconds. The default is 31 seconds.

*startup-query-count*

The number of queries sent at startup. The range is from 1 through 10. The default is 2.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/vlan/11/ip/igmp

### Request Body

None

### Response Body

```
<igmp xmlns="urn:brocade.com:mgmt:brocade-igmp-snooping" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/vlan/11/ip/igmp">
  <snooping y:self="/rest/config/running/vlan/11/ip/igmp/snooping">
    <version>3</version>
    <querier y:self="/rest/config/running/vlan/11/ip/igmp/snooping/querier">
      </querier>
    <mrouter y:self="/rest/config/running/vlan/11/ip/igmp/snooping/mrouter">
      </mrouter>
    </snooping>
  </igmp>
```

The following is an example of the POST operation to configure a VLAN port member to be a multicast router interface.

### URI

http://host:80/rest/config/running/vlan/11/ip/igmp/snooping/mrouter

### Request Body

```
<interface><igmps-if-type>ethernet</igmps-if-type><value>3/12</value></interface>
```

### Response Body

None

The following is an example of the DELETE operation to remove IGMP snooping last-member query interval.

### *URI*

http://host:80/rest/config/running/vlan/{vlan-num}/ip/igmp/snooping/last-member-query-interval

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.

# vlan/dot1q

Configures, modifies, or retrieves VLAN dot1q commands.

## Resource URIs

URI	Description
<base_URI>/config/running/vlan	VLAN commands.

GET URIs	Description
<base_URI>/config/running/vlan	VLAN commands.
<base_URI>/config/running/vlan/dot1q	Dot1q parameters.
<base_URI>/config/running/vlan/dot1q/tag/native	Retrieves Dot1q parameter.

PUT URI	Payload	Description
<base_URI>/config/running/vlan/dot1q/tag/native	<native></native>	Configures Dot1q parameter.

DELETE URIs
<base_URI>/config/running/vlan/dot1q/tag/native

## Parameters

*native*

Enables tagged behavior for native-VLANs.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.



## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/vlan/dot1q/tag/native

### Request Body

None

### Response Body

```
<native xmlns="urn:brocade.com:mgmt:brocade-vlan" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/vlan/dot1q/tag/native">true</native>\r
```

The following example uses the PUT option to configure native tag.

### URI

http://host:80/rest/config/running/vlan/dot1q/tag/native

### Request Body

```
<native></native>
```

### Response Body

None

The following example uses the DELETE option to remove Dot1q configuration.

### URI

http://host:80/rest/config/running/vlan/dot1q/tag/native

### Request Body

None

### Response Body

None

## History

Release version	History
17s.1.00	This API call was introduced.

# vlan/{vlan-name}/mac

Configures MAC access group.

## Resource URIs

URI	Description
<base_URI>/config/running/vlan/{vlan-name}/mac	Configures MAC access group.

GET URIs	Description
<base_URI>/config/running/vlan/{name}/mac	Displays MAC configuration.
<base_URI>/config/running/vlan/{name}/mac/access-group/{mac-access-list}/{mac-direction}	Displays MAC direction.
<base_URI>/config/running/vlan/{name}/mac/access-group/{mac-access-list}/{mac-direction}/traffic-type	Displays traffic type

POST URIs	Payload	Description
<base_URI>/config/running/vlan/{name}/mac	<access-group><mac-access-list>{mac-acl-name}</mac-access-list><mac-direction>{enumeration}</mac-direction></access-group>	Configure MAC access list

PATCH URIs	Payload	Description
<base_URI>/config/running/vlan/{name}/mac/access-group/{mac-access-list}/{mac-direction}	<access-group><traffic-type>{enumeration}</traffic-type></access-group>	Configures traffic type: Switched traffic only.

PUT URIs	Payload	Description
<base_URI>/config/running/vlan/{name}/mac/access-group/{mac-access-list}/{mac-direction}/traffic-type	<traffic-type>{enumeration}</traffic-type>	Configures traffic type: Switched traffic only.

DELETE URIs
<base_URI>/config/running/vlan/{name}/mac
<base_URI>/config/running/vlan/{name}/mac/access-group/{mac-access-list}/{mac-direction}
<base_URI>/config/running/vlan/{name}/mac/access-group/{mac-access-list}/{mac-direction}/traffic-type

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/vlan/445/mac

### Request Body

None

### Response Body

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-mac-access-list" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/vlan/445/mac/access-group/mac_1%2Cin">
  <mac-access-list>mac_1</mac-access-list>
  <mac-direction>in</mac-direction>
</access-group>
```

The following example uses the POST option to configure MAC access-group.

### URI

http://host:80/rest/config/running/mac

### Request Body

```
<access-group>
  <mac-access-list>mac_1</mac-access-list>
  <mac-direction>out</mac-direction>
</access-group>
```

### Response Body

None

The following example uses the DELETE a MAC access-group.

### URI

http://host:80/rest/config/running/vlan/345/mac/access-group/mac-1/out

### Request Body

None

### Response Body

None

vlan/{vlan-name}/mac

## History

Release version	History
17s.1.00	This API call was introduced.

# vrf

Configures, modifies, or retrieves VRF configurations.

## Resource URIs

URI	Description
<base_URI>/config/running/vrf	VRF configurations.

GET URIs	Description
<base_URI>/config/running/vrf/{vrf-name}	VRF configurations.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast	Retrieves IPv4 address family configurations.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/max-route	Retrieves IPv4 address family max route.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast	Retrieves IPv6 address family configurations.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast/max-route	Retrieves IPv6 address family max route.
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id	Retrieves IP route details.

POST URIs	Payload	Description
<base_URI>/config/running/	<vrf>(name)</vrf>	Configures VRF.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4	<unicast />	Configures unicast IPv4 address family.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6	<unicast />	Configures unicast IPv6 address family.

PUT URIs	Payload	Description
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id	<router-id>(ip-address)</router-id>	Configures IP route.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/max-route	<max-route>(unit32)</max-route>	Configures unicast IPv4 address family max-route.
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast/max-route	<max-route>(unit32)</max-route>	Configures unicast IPv6 address family max route.
<base_URI>/config/running/vrf/{vrf-name}	<rd>(ASN:NN)</rd>	Configures route distinguisher.

DELETE URIs
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/max-route
<base_URI>/config/running/vrf/{vrf-name}/address-family/ipv6/unicast/max-route
<base_URI>/config/running/vrf/{vrf-name}

## Parameters

<i>vrf-name</i>	Specifies the VRF name.
<i>rd</i>	Specifies the ASN number.
<i>max-route</i>	Specifies the maximum number of routes.
<i>router-id</i>	Specifies IP address.

## Usage Guidelines

GET, POST, PUT, PATCH, DELETE, OPTIONS, and HEAD operations are supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/config/running/vrf

### Request Body

None

### Response Body

```
<vrf xmlns="urn:brocade.com:mgmt:brocade-vrf" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/vrf/mgmt-vrf">
  <vrf-name>mgmt-vrf</vrf-name>
  <rd>1:2</rd>
  <address-family y:self="/rest/config/running/vrf/mgmt-vrf/address-family">
    <ipv4 y:self="/rest/config/running/vrf/mgmt-vrf/address-family/ipv4">
      <unicast y:self="/rest/config/running/vrf/mgmt-vrf/address-family/ipv4/unicast">
        <max-route>129</max-route>
      </unicast>
    </ipv4>
    <ipv6 y:self="/rest/config/running/vrf/mgmt-vrf/address-family/ipv6">
      <unicast y:self="/rest/config/running/vrf/mgmt-vrf/address-family/ipv6/unicast">
        </unicast>
      </ipv6>
    </address-family>
  <ip y:self="/rest/config/running/vrf/mgmt-vrf/ip">
    <router-id>1.1.1.1</router-id>
  </ip>
  <ipv6 y:self="/rest/config/running/vrf/mgmt-vrf/ipv6">
    <router-id>1.2.1.1</router-id>
  </ipv6>
</vrf>
```

The following is an example of the POST operation to add a VRF.

### *URI*

http://host:80/rest/config/running

### *Request Body*

```
<vrf>vrf1</vrf>
```

### *Response Body*

None

The following is an example of the DELETE operation to remove a VRF.

### *URI*

http://host:80/rest/config/running/vrf/vrf1

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
17s.1.00	This API call was introduced.





# Operational-state APIs

## bridge-domain-mac-state

Displays the bridge-domain MAC state.

### Resource URIs

URI	Description
<base_URI>/operational-state/bridge-domain-mac-state/{bd-id}	Displays the bridge-domain MAC state.

### Usage Guidelines

Only GET operation is supported.

### Examples

#### URI

http://host:80/rest/operational-state/bridge-domain-mac-state

#### Request Body

None

#### Response Body

```
<bridge-domain-mac-state xmlns="urn:brocade.com:mgmt:brocade-l2sys-operational" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state/bridge-domain-mac-state/1">
  <bd-id>1</bd-id>
  <no-of-mac>20</no-of-mac>
  <no-of-static-mac>0</no-of-static-mac>
</bridge-domain-mac-state>
```

### History

Release version	History
17s.1.00	This API call was introduced.

# bridge-domain-state

Displays the bridge-domain state.

## Resource URIs

URI	Description
<base_URI>/operational-state/bridge-domain-state	Displays the bridge-domain state.

## Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/bridge-domain-state

### Request Body

None

### Response Body

```
<bridge-domain-state xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" y:self="/rest/operational-
state/bridge-domain-state">
  <bridge-domain-counter y:self="/rest/operational-state/bridge-domain-state/bridge-domain-counter">
    <no-of-bd>97</no-of-bd>
    <no-of-vpls-bd>97</no-of-vpls-bd>
    <no-of-dynamic-mac>0</no-of-dynamic-mac>
    <no-of-static-mac>0</no-of-static-mac>
  </bridge-domain-counter>
  <bridge-domain-list y:self="/rest/operational-state/bridge-domain-state/bridge-domain-list/4000">
    <bd-id>4000</bd-id>
    <vc-id>0</vc-id>
    <active-ac-lif-count>2</active-ac-lif-count>
    <config-ac-lif-count>2</config-ac-lif-count>
    <active-vfi-lif-count>0</active-vfi-lif-count>
    <config-vfi-lif-count>0</config-vfi-lif-count>
    <local-switching>true</local-switching>
    <block-bpdu>true</block-bpdu>
    <bd-type>2</bd-type>
    <ve-ifindex>0</ve-ifindex>
    <pw-profile>default</pw-profile>
    <mac-limit>0</mac-limit>
    <statistics>false</statistics>
    <active-tunnel-count>0</active-tunnel-count>
    <config-tunnel-count>0</config-tunnel-count>
    <outer-vlan-list y:self="/rest/operational-state/bridge-domain-state/bridge-domain-list/4000/outer-
vlan-list/220">
      <outer-vlan>220</outer-vlan>
    </outer-vlan-list>
    <outer-vlan-list y:self="/rest/operational-state/bridge-domain-state/bridge-domain-list/4000/outer-
vlan-list/8096">
      <outer-vlan>8096</outer-vlan>
    </outer-vlan-list>
  </bridge-domain-list>
</bridge-domain-state>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# bridge-domain-state/bridge-domain-list

Displays the bridge-domain list.

## Resource URIs

URI	Description
<base_URI>/operational-state/bridge-domain-state/bridge-domain-list	Displays the bridge-domain list.

## Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/bridge-domain-state/bridge-domain-list

### Request Body

None

### Response Body

```
<bridge-domain-list xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state/bridge-domain-state/bridge-domain-list/1">
  <bd-id>1</bd-id>
  <vc-id>1</vc-id>
  <active-ac-lif-count>1</active-ac-lif-count>
  <config-ac-lif-count>1</config-ac-lif-count>
  <active-vfi-lif-count>1</active-vfi-lif-count>
  <config-vfi-lif-count>1</config-vfi-lif-count>
  <local-switching>true</local-switching>
  <block-bpdu>true</block-bpdu>
  <bd-type>2</bd-type>
  <ve-ifindex>0</ve-ifindex>
  <pw-profile>tagged</pw-profile>
  <mac-limit>0</mac-limit>
  <statistics>true</statistics>
  <outer-vlan-list y:self="/rest/operational-state/bridge-domain-state/bridge-domain-list/1/outer-vlan-list/501">
    <outer-vlan>501</outer-vlan>
    <no-of-up-tagged-ports>1</no-of-up-tagged-ports>
    <no-of-up-untagged-ports>0</no-of-up-untagged-ports>
    <tagged-ports-list y:self="/rest/operational-state/bridge-domain-state/bridge-domain-list/1/outer-vlan-list/501/tagged-ports-list/%22eth2/32.501%22">
      <lif-name>eth2/32.501</lif-name>
      <lif-ifindex>738200320</lif-ifindex>
      <outer-vlan>501</outer-vlan>
      <inner-vlan>65535</inner-vlan>
      <flags>134</flags>
      <ivid>12289</ivid>
      <encap-id>65568</encap-id>
      <ingress-stats-id>0</ingress-stats-id>
      <egress-stats-id>0</egress-stats-id>
      <op-state>false</op-state>
      <service-instance>501</service-instance>
    </tagged-ports-list>
  </outer-vlan-list>
</bridge-domain-list>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# mctd-client-state-state

Displays the MCT client operational information.

## Resource URIs

URI	Description
<base_URI>/operational-state/mctd-client-state-state/show-cluster-mctd-client	Displays MCT cluster client states.
<base_URI>/operational-state/mctd-client-state-state/show-cluster-mem-vlan/1/num-vlans	Displays the number of VLANs configured.

## Usage Guidelines

Only GET operation is supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/operational-state/mctd-client-state-state

### Request Body

None

### Response Body

```
<mctd-client-state-state xmlns="urn:brocade.com:mgmt:brocade-mct-operational" y:self="/rest/operational-state/mctd-client-state-state">
  <show-cluster-mctd-client y:self="/rest/operational-state/mctd-client-state-state/show-cluster-mctd-client/65535">
    <cluster-id>65535</cluster-id>
  </show-cluster-mctd-client>
  <show-cluster-mem-vlan y:self="/rest/operational-state/mctd-client-state-state/show-cluster-mem-vlan/1814792264">
    <cluster-id>1814792264</cluster-id>
  </show-cluster-mem-vlan>
</mctd-client-state-state>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# mct-state

Displays MCT operational information.

## Resource URIs

URI	Description
<base_URI>/operational-state/mct-state	Displays MCT operational information.
<base_URI>/operational-state/mct-state/show-cluster/{cluster-id}	Displays the complete client-information list, which includes cluster-id, client-id, client-name, client-esi, client-interface, client-state, active vlan list, configured vlan list
<base_URI>/operational-state/mct-state/show-cluster/{cluster-id}/cluster-name	Displays the cluster name configured.
<base_URI>/operational-state/show-cluster/{cluster-id}/cluster-status	Provides the cluster status: True for Up status, False for Down status.
<base_URI>/operational-state/show-cluster/{cluster-id}/client-isolation-status	Provides the configured client-isolation status(strict mode or Loose mode).
<base_URI>/operational-state/mct-state/show-cluster/1/num-peers	Displays number of peers.
<base_URI>/operational-state/mct-state/show-cluster/1/num-clients	Displays number of clients.
<base_URI>/operational-state/mct-state/show-cluster/1/num-config-vlans	Displays number of configured VLANs.
<base_URI>/operational-state/mct-state/show-cluster/1/num-active-vlans	Displays number of active VLANs.
<base_URI>/operational-state/mct-state/show-cluster/1/client-info-list/1/1/client-state	Displays client state.
<base_URI>/operational-state/mct-state/show-cluster/1/client-info-list/1/1/num-config-vlans	Displays number of VLANs.

## Usage Guidelines

Only GET operation is supported.

## Examples

The following example uses the GET option to retrieve the configuration details.

### URI

http://host:80/rest/operational-state/mct-state/show-cluster/65535/cluster-name

### Request Body

None

### Response Body

```
<cluster-name xmlns="urn:brocade.com:mgmt:brocade-nsm-operational"
xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state/mct-state/show-cluster/65535/
cluster-name">SQAFREEDOMCLUSTER</cluster-name>
```

## History

Release version	History
17s.1.00	This API call was introduced.



## ptp-state/brief

Displays the precision time protocol (PTP) port state of all PTP-enabled interfaces on the local boundary clock.

### Resource URIs

URI	Description
<base_URI>/operational-state/ptp-state/brief	Displays the PTP port state of all PTP-enabled interfaces on the local boundary clock.

### Usage Guidelines

Only GET operation is supported.

## Examples

The following example uses the GET option to retrieve the PTP port state of all PTP-enabled interfaces.

### URI

http://host:80/rest/operational-state/ptp-state/brief

### Request Body

None

### Response Body

```
<brief xmlns="urn:brocade.com:mgmt:brocade-ptp-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/ptp-state/brief">
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/5%22%22">
    <port>&quot;Eth 0/5&quot;</port>
    <ptp-state>Slave</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/6%22%22">
    <port>&quot;Eth 0/6&quot;</port>
    <ptp-state>Passive</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/7%22%22">
    <port>&quot;Eth 0/7&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/23%22%22">
    <port>&quot;Eth 0/23&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/24%22%22">
    <port>&quot;Eth 0/24&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/25:4%22%22">
    <port>&quot;Eth 0/25:4&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/32%22%22">
    <port>&quot;Eth 0/32&quot;</port>
    <ptp-state>Master</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/25:3%22%22">
    <port>&quot;Eth 0/25:3&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/25:2%22%22">
    <port>&quot;Eth 0/25:2&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
  <port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth
0/25:1%22%22">
    <port>&quot;Eth 0/25:1&quot;</port>
    <ptp-state>&quot;Disabled(Link down)&quot;</ptp-state>
  </port-detail-list>
</brief>
```

```
</port-detail-list>  
<port-detail-list y:self="/rest/operational-state/ptp-state/brief/port-detail-list/%22%22Eth  
0/31:1%22%22">  
  <port>&quot;Eth 0/31:1&quot;</port>  
  <ptp-state>Master</ptp-state>  
</port-detail-list>  
</brief>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# ptp-state/clock

Displays the precision time protocol (PTP) properties of the local boundary clock.

## Resource URIs

URI	Description
<base_URI>/operational-state/ptp-state/clock	Displays the PTP properties on the local boundary clock.

## Usage Guidelines

Only GET operation is supported.

## Examples

The following example uses the GET option to retrieve the PTP properties of a local boundary clock.

### URI

http://host:80/rest/operational-state/ptp-state/clock

### Request Body

None

### Response Body

```
<clock xmlns="urn:brocade.com:mgmt:brocade-ptp-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/ptp-state/clock">
  <type>&quot;Boundary Clock&quot;</type>
  <identity>60:9c:9f:ff:fe:b0:d6:00</identity>
  <domain>50</domain>
  <clock-state>&quot;Time Synced&quot;</clock-state>
  <ptp-port-count>4</ptp-port-count>
  <priority1>42</priority1>
  <priority2>40</priority2>
  <offset-from-master>+0.000000001</offset-from-master>
  <mpd>+0.000000061</mpd>
  <steps-removed>4</steps-removed>
  <local-time>&quot;Sun Feb 19 23:11:24 2017&quot;</local-time>
  <quality y:self="/rest/operational-state/ptp-state/clock/quality">
    <clock-class>248</clock-class>
    <accuracy>254</accuracy>
    <offset>65535</offset>
  </quality>
</clock>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# ptp-state/time-property

Displays the properties of the precision time protocol (PTP) clock.

## Resource URIs

URI	Description
<base_URI>/operational-state/ptp-state/time-property	Displays the properties of the PTP clock.

## Usage Guidelines

Only GET operation is supported.

## Examples

The following example uses the GET option to retrieve the properties of the PTP clock.

### URI

http://host:80/rest/operational-state/ptp-state/time-property

### Request Body

None

### Response Body

```
<time-property xmlns="urn:brocade.com:mgmt:brocade-ptp-operational" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state/ptp-state/time-property">
  <utc-offset-valid>1</utc-offset-valid>
  <utc-offset>36</utc-offset>
  <leap59>0</leap59>
  <leap61>0</leap61>
  <time-traceable>1</time-traceable>
  <frequency-traceable>1</frequency-traceable>
  <timescale>1</timescale>
  <timesource>&quot;160 (Internal Source)&quot;</timesource>
</time-property>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# sfm-state

Retrieves Switch Fabric Module (SFM) state information.

## Resource URIs

URI	Description
<base_URI>/operational-state/sfm-state	Displays Switch Fabric Module (SFM) state information.
<base_URI>/operational-state/sfm-state/mcast	Displays fabric mcast entries.
<base_URI>/operational-state/sfm-state/statistics	Displays fabric global counters.
<base_URI>/operational-state/sfm-state/links	Displays fabric links.
<base_URI>/operational-state/sfm-state/queue	Displays fabric queues.
<base_URI>/operational-state/sfm-state/thresholds	Displays fabric thresholds.
<base_URI>/operational-state/sfm-state/connectivity	Displays fabric connectivity.
<base_URI>/operational-state/sfm-state/serdesmode	Displays fabric serdes-mode.

## Usage Guidelines

Only GET operation is supported.







## History

Release version	History
17s.1.00	This API call was introduced.

# sub-interface-statistics-state/bridge-domain-statistics

Displays bridge domain statistics.

## Resource URIs

URI	Description
<base_URI>/operational-state/sub-interface-statistics-state/bridge-domain-statistics	Displays bridge domain statistics.

## Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/sub-interface-statistics-state/bridge-domain-statistics

### Request Body

None

### Response Body

```
<bridge-domain-statistics xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" xmlns:y="http://
brocade.com/ns/rest" y:self="/rest/operational-state/sub-interface-statistics-state/bridge-domain-
statistics/1">
  <bd-id>1</bd-id>
  <lif-statistics y:self="/rest/operational-state/sub-interface-statistics-state/bridge-domain-
statistics/1/lif-statistics/738200320">
    <lif-id>738200320</lif-id>
    <rx-packets>229229221</rx-packets>
    <tx-packets>229167043</tx-packets>
    <rx-bytes>323441104638</rx-bytes>
    <tx-bytes>323697733400</tx-bytes>
    <lif-name>eth2/32.501</lif-name>
  </lif-statistics>
  <lif-statistics y:self="/rest/operational-state/sub-interface-statistics-state/bridge-domain-
statistics/1/lif-statistics/755073026">
    <lif-id>755073026</lif-id>
    <rx-packets>229229221</rx-packets>
    <tx-packets>229167043</tx-packets>
    <rx-bytes>323441104638</rx-bytes>
    <tx-bytes>323697733400</tx-bytes>
    <lif-name>4.4.3.2</lif-name>
  </lif-statistics>
</bridge-domain-statistics>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# sub-interface-statistics-state/bridge-domain-statistics/lif-statistics

Displays the bridge domain lif statistics.

## Resource URIs

URI	Description
<base_URI>/operational-state/sub-interface-statistics-state/bridge-domain-statistics/lif-statistics	Displays the bridge domain lif statistics.

## Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/sub-interface-statistics-state/bridge-domain-statistics

### Request Body

None

### Response Body

```
<bridge-domain-statistics xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" xmlns:y="http://
brocade.com/ns/rest" y:self="/rest/operational-state/sub-interface-statistics-state/bridge-domain-
statistics/1">
  <bd-id>1</bd-id>
  <lif-statistics y:self="/rest/operational-state/sub-interface-statistics-state/bridge-domain-
statistics/1/lif-statistics/738200320">
    <lif-id>738200320</lif-id>
    <rx-packets>229229221</rx-packets>
    <tx-packets>229167043</tx-packets>
    <rx-bytes>323441104638</rx-bytes>
    <tx-bytes>323697733400</tx-bytes>
    <lif-name>eth2/32.501</lif-name>
  </lif-statistics>
  <lif-statistics y:self="/rest/operational-state/sub-interface-statistics-state/bridge-domain-
statistics/1/lif-statistics/755073026">
    <lif-id>755073026</lif-id>
    <rx-packets>229229221</rx-packets>
    <tx-packets>229167043</tx-packets>
    <rx-bytes>323441104638</rx-bytes>
    <tx-bytes>323697733400</tx-bytes>
    <lif-name>4.4.3.2</lif-name>
  </lif-statistics>
</bridge-domain-statistics>
```

## History

Release version	History
17s.1.00	This API call was introduced.



# Operations API

---

## activate-status

Retrieves the firmware activation status.

### Resource URIs

URI	Description
<base_URI>/operations/activate-status	Retrieves the firmware activation status.

### Parameters

*overall-status*

Displays overall activation status on the switch.

### Usage Guidelines

Only POST operation is supported.

### Examples

#### *URI*

http://host:80/rest/operations/activate-status

#### *Request Body*

```
<activate-status></activate-status>
```

#### *Response Body*

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <overall-status>0</overall-status>
</output>
```

### History

Release version	Command history
17s.1.00	This API call was introduced.

# dad-status

Displays the current status of firmware download.

## Resource URIs

URI	Description
<base_URI>/operations/dad-status	Displays the current status of firmware download.

## Parameters

*index*

Displays the index number.

*date-and-time-info*

Displays the date and time information.

*message*

Displays the status message.

*dad-last-state*

Displays the dad last state status as dad-in-progress, dad-failed, or dad-completed.

## Usage Guidelines

Only POST operation is supported.



## Examples

### URI

http://host:80/rest/operational-state/dad-status

### Request Body

```
<dad-status></dad-status>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <dad-status-entries>
    <index>1</index>
    <date-and-time-info>Fri Oct 25 21:01:12 GMT 2013</date-and-time-info>
    <message>DHCP Auto-deployment enabled.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>2</index>
    <date-and-time-info>Fri Oct 25 21:09:57 GMT 2013</date-and-time-info>
    <message>DHCP Auto-deployment failed during DHCP process.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>3</index>
    <date-and-time-info>Thu Mar 13 05:15:06 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>14</index>
    <date-and-time-info>Thu Mar 13 19:45:10 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>15</index>
    <date-and-time-info>Thu Mar 13 20:24:50 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>34</index>
    <date-and-time-info>Sun Mar 16 15:53:23 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>35</index>
    <date-and-time-info>Sun Mar 16 16:32:33 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>36</index>
    <date-and-time-info>Sun Mar 16 17:13:51 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>37</index>
    <date-and-time-info>Sun Mar 16 18:01:41 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>38</index>
    <date-and-time-info>Sun Mar 16 18:46:12 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
  <dad-status-entries>
    <index>39</index>
```

```

    <date-and-time-info>Sun Mar 16 19:31:00 SCT 2014</date-and-time-info>
    <message>DHCP Auto-deployment failed to enable.</message>
  </dad-status-entries>
</dad-status-entries>
  <index>40</index>
  <date-and-time-info>Sun Mar 16 20:16:07 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>41</index>
  <date-and-time-info>Sun Mar 16 20:59:21 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
</dad-status-entries>
  <index>42</index>
  <date-and-time-info>Sun Mar 16 21:41:38 SCT 2014</date-and-time-info>
  <message>DHCP Auto-deployment failed to enable.</message>
</dad-status-entries>
<dad-last-state>dad-failed</dad-last-state>
</output>

```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# firmware-download

Retrieves the firmware level commands.

## Resource URIs

URI	Description
<base_URI>/operations/firmware-download	Retrieves the firmware level commands.

## Parameters

*fwdl-status*

Displays the status. 0 or 1 - Success. Any negative value is error.

*fwdl-msg*

0 - Success but disruptive/non-ISSU upgrade, 1 - Success and ISSU upgrade. Any negative value is error.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/firmware-download

### Request Body (for ISSU)

```
<firmware-download xmlns="urn:brocade.com:mgmt:brocade-firmware">
  <ftp>
    <user>fvt</user>
    <password>pray4green</password>
    <host>10.31.2.27</host>
    <directory>/proj/sj_eng/defects/gpai/clone_dist</directory>
  </ftp>
  <auto-activate/>
</firmware-download
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
<fwdl-cmd-status>0</fwdl-cmd-status>
<fwdl-cmd-msg> firmware download initiated.</fwdl-cmd-msg>
</output>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# fwdl-status

Retrieves the firmware download status.

## Resource URIs

URI	Description
<base_URI>/operations/fwdl-status	Retrieves the firmware download status.

## Parameters

*fwdl-state*

Displays the firmware download state.

*number-of-entries*

Specifies the number of status entries.

*index*

Displays the sequence number for the message.

*blade-name*

Displays the name of the blade.

*message-id*

Displays the message identifier.

*date-and-time-info*

Displays the date and time of the message. The format is YYYY-MM-DD/HH:MM:SS.SSSS.

*message*

Displays the textual description of the status.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/fwdl-status

### Request Body

```
<fwdl-status></fwdl-status>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <fwdl-state>completed</fwdl-state>
  <number-of-entries>18</number-of-entries>
  <fwdl-entries>
    <index>1</index>
    <blade-name>SW/0</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:31:31</date-and-time-info>
    <message>Firmware install begins.</message>
  </fwdl-entries>
  <fwdl-entries>
    <index>2</index>
    <blade-name>SW/0</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:34:44</date-and-time-info>
    <message>Firmware install ends.</message>
  </fwdl-entries>
  <fwdl-entries>
    <index>3</index>
    <blade-name>SW/1</blade-name>
    <message-id>0</message-id>
    <date-and-time-info>2014-06-23/19:34:44</date-and-time-info>
    <message>Firmware install begins.</message>
  </fwdl-entries>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-arp

Retrieves the ARP cache information.

## Resource URIs

URI	Description
<base_URI>/operations/get-arp	Retrieves the ARP cache details.

## Parameters

*ip-address*

Displays the IP address of the ARP entry.

*mac-address*

Displays the MAC address of the ARP entry.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*is-resolved*

Indicates whether the ARP entry is resolved or not.

*age*

Displays the age of the ARP entry.

*entry-type*

Displays the type of the ARP entry.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-arp

### Request Body

```
<get-arp></get-arp>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-arp'>
  <arp-entry>
    <ip-address>20.0.0.122</ip-address>
    <mac-address>0005.3379.407a</mac-address>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
    <is-resolved>true</is-resolved>
    <age>03:16:05</age>
    <entry-type>dynamic</entry-type>
  </arp-entry>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.



# get-contained-in-ID

Retrieves enclosure related information on embedded platforms.

## Resource URIs

URI	Description
<base_URI>/operations/get-contained-in-ID	Retrieves enclosure related information on embedded platforms.

## Parameters

*contained-in-ID*

Provides present slot ID of switch.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-contained-in-ID

### Request Body

```
<get-contained-in-ID></get-contained-in-ID>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-Enclosure-show'>
  <contained-in-ID>Bay 7</contained-in-ID>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-interface-detail

Retrieves operational data for all the VLANs, physical interfaces and port-channels.

## Resource URIs

URI	Description
<base_URI>/operations/get-interface-detail	Retrieves operational data for a given VLAN and enumeration of all the interfaces belonging to this VLAN.

## Parameters

### *interface-type*

Displays the interface type.

### *interface-name*

Displays the interface name.

### *port-mode*

Displays the operational mode of the particular interface. This is applicable only for physical interfaces or port-channel interfaces.

### *if-name*

Displays the interface display name as in MIB-II's ifTable. However interface-name and interface-type values of this instance forms fully qualified name for this interface.

### *if-state*

Displays the current operational state of this interface.

### *line-protocol-state*

Displays the 'Line protocol' state of the interface.

### *line-protocol-state-info*

Displays the reason for the current line protocol state of the interface.

### *hardware-type*

Displays the type of the interface.

### *current-hardware-address*

Displays the address of the interface at its protocol sub-layer.

### *logical-hardware-address*

Displays the address of the interface at its protocol sub-layer.

### *ifindex*

A unique value, greater than zero, for each interface.

### *mtu*

Displays the IP MTU value of the interface.

### *actual-line-speed*

Displays the actual line speed of this interface.

### *configured-line-speed*

Displays the administratively configured line speed of the interface.

*flow-control*

Displays the 'Flow control' for the interface.

*queuing-strategy*

Displays the 'Queuing strategy' for the interface.

*ifHCInOctets*

Displays the total number of octets received on the interface, including framing characters.

*ifHCInUcastPkt*

Displays the number of packets, delivered by this sub-layer to a higher (sub-)layer, which were not addressed to a multicast or broadcast address at this sub-layer.

*ifHCInMulticastPkts*

Displays the number of packets, delivered by this sub-layer to a higher (sub-)layer, which were addressed to a multicast address at the sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses.

*ifHCInBroadcastPkts*

Displays the number of packets, delivered by the sub-layer to a higher (sub-)layer, which were addressed to a broadcast address at the sub-layer.

*ifHCInErrors*

For packet-oriented interfaces, the number of inbound packets that contained errors preventing them from being deliverable to a higher-layer protocol. For character-oriented or fixed-length interfaces, the number of inbound transmission units that contained errors preventing them from being deliverable to a higher-layer protocol.

*ifHCOctets*

Displays the total number of octets transmitted out of the interface, including framing characters.

*ifHCOOutUcastPkts*

Displays the total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at the sub-layer, including those that were discarded or not sent.

*ifHCOOutMulticastPkts*

Displays the total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses.

*ifHCOOutBroadcastPkt*

Displays the total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent.

*ifHCOOutErrors*

For packet-oriented interfaces, the number of outbound packets that could not be transmitted because of errors. For character-oriented or fixed-length interfaces, the number of outbound transmission units that could not be transmitted because of errors.

*if-description*

Displays the textual string containing information about the interface.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-interface-detail

### Request Body

```
<get-interface-detail></get-interface-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>1</interface-name>
    <port-mode>unknown</port-mode>
    <if-name>Port-channel 1</if-name>
    <if-state>down</if-state>
    <line-protocol-state>down</line-protocol-state>
    <line-protocol-state-info> (admin down)</line-protocol-state-info>
    <hardware-type>aggregate</hardware-type>
    <current-hardware-address>60:9c:9f:0d:3e:4e</current-hardware-address>
    <logical-hardware-address>60:9c:9f:0d:3e:4e</logical-hardware-address>
    <if-description>Insight port-channel on MM1</if-description>
    <ifindex>671088641</ifindex>
    <mtu>1548</mtu>
    <actual-line-speed>nil</actual-line-speed>
    <configured-line-speed>10Gbps</configured-line-speed>
    <flow-control></flow-control>
    <queuing-strategy>fifo</queuing-strategy>
    <ifHCInOctets>0</ifHCInOctets>
    <ifHCInUcastPkts>0</ifHCInUcastPkts>
    <ifHCInMulticastPkts>0</ifHCInMulticastPkts>
    <ifHCInBroadcastPkts>0</ifHCInBroadcastPkts>
    <ifHCInErrors>0</ifHCInErrors>
    <ifHCOutOctets>0</ifHCOutOctets>
    <ifHCOutUcastPkts>0</ifHCOutUcastPkts>
    <ifHCOutMulticastPkts>0</ifHCOutMulticastPkts>
    <ifHCOutBroadcastPkts>0</ifHCOutBroadcastPkts>
    <ifHCOutErrors>0</ifHCOutErrors>
  </interface>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>2</interface-name>
    <port-mode>unknown</port-mode>
    <if-name>Port-channel 2</if-name>
    <if-state>down</if-state>
    <line-protocol-state>down</line-protocol-state>
    <line-protocol-state-info> (admin down)</line-protocol-state-info>
    <hardware-type>aggregate</hardware-type>
    <current-hardware-address>60:9c:9f:0d:3e:4f</current-hardware-address>
    <logical-hardware-address>60:9c:9f:0d:3e:4f</logical-hardware-address>
    <if-description>Insight port-channel on MM2</if-description>
    <ifindex>671088642</ifindex>
    <mtu>1548</mtu>
    <actual-line-speed>nil</actual-line-speed>
    <configured-line-speed>10Gbps</configured-line-speed>
    <flow-control></flow-control>
    <queuing-strategy>fifo</queuing-strategy>
    <ifHCInOctets>0</ifHCInOctets>
    <ifHCInUcastPkts>0</ifHCInUcastPkts>
    <ifHCInMulticastPkts>0</ifHCInMulticastPkts>
    <ifHCInBroadcastPkts>0</ifHCInBroadcastPkts>
    <ifHCInErrors>0</ifHCInErrors>
```

```

    <ifHCOutOctets>0</ifHCOutOctets>
    <ifHCOutUcastPkts>0</ifHCOutUcastPkts>
    <ifHCOutMulticastPkts>0</ifHCOutMulticastPkts>
    <ifHCOutBroadcastPkts>0</ifHCOutBroadcastPkts>
    <ifHCOutErrors>0</ifHCOutErrors>
  </interface>
  <has-more>false</has-more>
</output>

```

If the entire information cannot be retrieved in a single execution, the last lines of output show has-more=true.

```

<has-more xmlns="urn:brocade.com:mgmt:brocade-interface-ext">true</has-more>
</rpc-reply>

```

In such cases the remaining information can be retrieved using "last-rcvd-interface" as shown in the following request body.

```

<get-interface-detail>
  <last-rcvd-interface>
    <interface-type>port-channel</interface-type>
    <interface-name>3</interface-name>
  </last-rcvd-interface>
</get-interface-detail>

```

The API can be used to retrieve information regarding a specific port by applying filter as in the following request body.

```

<get-interface-detail>
  <interface-type>port-channel</interface-type>
  <interface-name>2</interface-name>
</get-interface-detail>

```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-interface-switchport

Retrieves switch-port/Layer 2 characteristics of the interfaces configured as switchport in the managed device.

## Resource URIs

URI	Description
<base_URI>/operations/get-interface-switchport	Returns switch-port or Layer 2 characteristics of all the interfaces in the managed device.

## Parameters

*interface-name*

Displays the Interface value.

*interface-type*

Displays the type of the interface.

*mode*

Displays the mode of the port-channel.

*ingress-filter-enabled*

Indicates if the 'Ingress filtering' is enabled for the interface.

*acceptable-frame-type*

Displays the switch-port ingress Frame admission policy - whether only tagged Frames are allowed or all.

*default-vlan*

Displays the 'default vlan' identifier value for this switch-port.

*vlanid*

Displays the list of active VLAN identifiers.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-interface-switchport

### Request Body

```
<get-interface-switchport></get-interface-switchport>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <switchport>
    <interface-name>11</interface-name>
    <interface-type>port-channel</interface-type>
    <mode>trunk</mode>
    <fcoe-port-enabled>false</fcoe-port-enabled>
    <ingress-filter-enabled>true</ingress-filter-enabled>
    <acceptable-frame-type>admit-only-vlan-tagged</acceptable-frame-type>
    <default-vlan>1</default-vlan>
    <active-vlans>
      <vlanid>1</vlanid>
      <vlanid>111</vlanid>
    </active-vlans>
  </switchport>
  <switchport>
    <interface-name>1/12</interface-name>
    <interface-type>ethernet</interface-type>
    <mode>trunk</mode>
    <fcoe-port-enabled>false</fcoe-port-enabled>
    <ingress-filter-enabled>true</ingress-filter-enabled>
    <acceptable-frame-type>admit-only-vlan-tagged</acceptable-frame-type>
    <default-vlan>1</default-vlan>
    <active-vlans>
      <vlanid>1</vlanid>
      <vlanid>110</vlanid>
    </active-vlans>
  </switchport>
  <switchport>
    <interface-name>1/67</interface-name>
    <interface-type>ethernet</interface-type>
    <mode>trunk</mode>
    <fcoe-port-enabled>false</fcoe-port-enabled>
    <ingress-filter-enabled>true</ingress-filter-enabled>
    <acceptable-frame-type>admit-only-vlan-tagged</acceptable-frame-type>
    <default-vlan>1</default-vlan>
    <active-vlans>
      <vlanid>1</vlanid>
      <vlanid>10</vlanid>
    </active-vlans>
  </switchport>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-ip-interface

Retrieves the IP interface details.

## Resource URIs

URI	Description
<base_URI>/operations/get-ip-interface	Retrieves the IP interface details.

## Parameters

*interface-type*

Displays the network interface name.

*interface-name*

Displays the Interface value.

*if-name*

Displays the interface display name as in MIB-II's ifTable. However interface-name and interface-type values of this instance forms fully qualified name for this interface.

*if-state*

Displays the current operational state of the interface.

*line-protocol-state*

Displays the 'Line protocol' state of the interface.

*ip-address*

Displays the IP address for the management interface.

*ipv4*

Displays the IP address in dotted decimal/Mask (A.B.C.D/M).

*ipv4-type*

Indicates whether IP address is primary/secondary and corresponding Broadcast IP.

*broadcast*

Displays the broadcast IP Address.

*ip-mtu*

Displays the MTU type.

*vrf*

Displays the VRF name.

## Usage Guidelines

Only POST operation is supported.



## Examples

### URI

http://host:80/rest/operations/get-ip-interface

### Request Body

```
<get-ip-interface></get-ip-interface>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>1</interface-name>
    <if-name>Port-channel 1</if-name>
    <if-state>down</if-state>
    <line-protocol-state>down</line-protocol-state>
    <ip-address>
      <ipv4>unassigned</ipv4>
    </ip-address>
  </interface>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>2</interface-name>
    <if-name>Port-channel 2</if-name>
    <if-state>down</if-state>
    <line-protocol-state>down</line-protocol-state>
    <ip-address>
      <ipv4>unassigned</ipv4>
    </ip-address>
  </interface>
  <has-more>false</has-more>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-last-config-update-time

Retrieves the time stamp of the last configuration change on the system.

## Resource URIs

URI	Description
<base_URI>/operations/get-last-config-update-time	Retrieves the time stamp of the last configuration change.

## Parameters

*last-config-update-time*

Displays the time stamp of the last configuration change.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-last-config-update-time

### Request Body

```
<get-last-config-update-time></get-last-config-update-time>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <last-config-update-time>1490392397</last-config-update-time>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-last-config-update-time-for-xpaths

Retrieves the time stamp of the last configuration change for xpaths.

## Resource URIs

URI	Description
<base_URI>/operations/get-last-config-update-time-for-xpaths	Retrieves the time stamp of the last configuration change for xpaths.

## Parameters

*xpath-string*

Displays the xpath string.

*last-config-update-time*

Indicates the time stamp of the last configuration change for xpath.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-last-config-update-time-for-xpaths

### Request Body

```
<get-last-config-update-time-for-xpaths></get-last-config-update-time-for-xpaths>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <last-config-update-time-for-xpaths>
    <xpath-string></xpath-string>
    <last-config-update-time>1402481614</last-config-update-time>
  </last-config-update-time-for-xpaths>
  <last-config-update-time-for-xpaths>
    <xpath-string>/cee-map</xpath-string>
    <last-config-update-time>1401508522</last-config-update-time>
  </last-config-update-time-for-xpaths>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-lldp-neighbor-detail

Retrieves the neighbor details of all the interfaces of the managed entity.

## Resource URIs

URI	Description
<base_URI>/operations/get-lldp-neighbor-detail	Retrieves the neighbor details of all the interfaces of the managed entity.

## Parameters

*local-interface-name*

Indicates the local interface display name.

*local-interface-ifindex*

Indicates the local interface IfIndex.

*local-interface-mac*

Indicates the local interface MAC address.

*remote-interface-name*

Indicates the remote interface display name.

*remote-interface-mac*

Indicates the remote interface MAC address.

*dead-interval*

Indicates the dead interval.

*remaining-life*

Indicates the remaining life period.

*remote-chassis-id*

Indicates the remote chassis ID.

*lldp-pdu-transmitted*

Displays the number of LLDP PDUs transmitted from the interface.

*lldp-pdu-received*

Displays the number of LLDP PDUs received by the interface.

*remote-system-name*

Indicates the remote system name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-lldp-neighbor-detail

### Request Body

```
<get-lldp-neighbor-detail></get-lldp-neighbor-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lldp-ext'>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/1</local-interface-name>
    <local-interface-ifindex>201334784</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8006</local-interface-mac>
    <remote-interface-name>port-channel 14/1/10</remote-interface-name>
    <remote-interface-mac>0005.3379.6de7</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>117</remaining-life>
    <remote-chassis-id>0005.3379.6d58</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>372</lldp-pdu-received>
    <remote-system-name>M4</remote-system-name>
  </lldp-neighbor-detail>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/3</local-interface-name>
    <local-interface-ifindex>201351168</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8008</local-interface-mac>
    <remote-interface-name>port1</remote-interface-name>
    <remote-interface-mac>0005.3348.8e4f</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>92</remaining-life>
    <remote-chassis-id>0005.3348.8e4f</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>366</lldp-pdu-received>
  </lldp-neighbor-detail>
  <lldp-neighbor-detail>
    <local-interface-name>Te 7/0/31</local-interface-name>
    <local-interface-ifindex>201580544</local-interface-ifindex>
    <local-interface-mac>0005.33ee.8024</local-interface-mac>
    <remote-interface-name>port-channel 6/0/31</remote-interface-name>
    <remote-interface-mac>0005.33e7.2803</remote-interface-mac>
    <dead-interval>120</dead-interval>
    <remaining-life>116</remaining-life>
    <remote-chassis-id>0005.33e7.27e0</remote-chassis-id>
    <lldp-pdu-transmitted>373</lldp-pdu-transmitted>
    <lldp-pdu-received>373</lldp-pdu-received>
    <remote-system-name>RIGEL-MOR</remote-system-name>
  </lldp-neighbor-detail>
  <has-more>false</has-more>
</output>
```

## History

Release version	History
17s.1.00	This API call was introduced.

# get-mac-acl-for-intf

Retrieves the MAC ACL applied on the interfaces.

## Resource URIs

URI	Description
<base_URI>/operations/get-mac-acl-for-intf	Retrieves the MAC ACL applied on the interfaces.

## Parameters

*interface-name*

Displays the interface name.

*interface-type*

Displays the interface type.

*policy-name*

Displays the MAC ACL policy name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-mac-acl-for-intf

### Request Body

```
<get-mac-acl-for-intf></get-mac-acl-for-intf>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-mac-access-list'>
  <interface>
    <interface-name>1/0/7</interface-name>
    <interface-type>port-channel</interface-type>
    <ingress-policy>
      <policy-name>stdmacacl</policy-name>
    </ingress-policy>
    <egress-policy>
      <policy-name>stdmacacl</policy-name>
    </egress-policy>
  </interface>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-mac-address-table

Retrieves the operational data for a given MAC entry with MAC type and interface (name and type).

## Resource URIs

URI	Description
<base_URI>/operations/get-mac-address-table	Returns operational data for a given MAC entry and the corresponding details of that MAC entry.

## Parameters

*vlanid*

Displays the VLAN ID.

*mac-address*

Displays the MAC address.

*mac-type*

Displays the MAC type.

*mac-state*

Displays the MAC state.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

## Usage Guidelines

Only POST operation is supported.



## Examples

### URI

http://host:80/rest/operations/get-mac-address-table

### Request Body

None

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-mac-address-table'>
  <mac-address-table>
    <vlanid>110</vlanid>
    <mac-address>60:9c:9f:5a:f5:15</mac-address>
    <mac-type>dynamic</mac-type>
    <mac-state>active</mac-state>
    <forwarding-interface>
      <interface-type>ethernet</interface-type>
      <interface-name>1/12</interface-name>
    </forwarding-interface>
  </mac-address-table>
  <mac-address-table>
    <vlanid>111</vlanid>
    <mac-address>60:9c:9f:5a:d7:15</mac-address>
    <mac-type>dynamic</mac-type>
    <mac-state>active</mac-state>
    <forwarding-interface>
      <interface-type>port-channel</interface-type>
      <interface-name>11</interface-name>
    </forwarding-interface>
  </mac-address-table>
  <has-more>false</has-more>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-media-detail

Retrieves the media properties of all the interfaces.

## Resource URIs

URI	Description
<base_URI>/operations/get-media-detail	Retrieves the media properties of all the interfaces.

## Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*encoding*

Displays the type of encoding used to transmit the data on this interface.

*vendor-name*

Displays the vendor of the interface.

*vendor-oui*

Displays the vendor IEEE company ID.

*vendor-pn*

Displays the vendor part number.

*vendor-rev*

Displays the vendor revision level.

*distance*

Displays the SFP distance.

*media-form-factor*

Displays the media form factor.

*wavelength*

Displays the wavelength of pluggable media.

*serial-no*

Displays the serial number.

*temperature*

Displays the module temperature (degrees C).

*date-code*

Displays the vendor's manufacturing date code.

*voltage*

This indicates the supply voltage (Volts).

*current*

Displays the laser diode drive current (milliAmps).

*tx-power*  
Displays the transmitted optical power (microWatts).

*rx-power*  
Displays the received optical power (microWatts).

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-media-detail

### Request Body

```
<get-media-detail></get-media-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>54/0/50</interface-name>
    <qsfp>
      <speed>40Gbps</speed>
      <connector>mpo-parallel-optic</connector>
      <encoding>ieee-802-3ab</encoding>
      <vendor-name>BROCADE</vendor-name>
      <vendor-oui>00:05:1e</vendor-oui>
      <vendor-pn>57-1000128-01</vendor-pn>
      <vendor-rev>A</vendor-rev>
      <distance>short-dist</distance>
      <media-form-factor>unknown</media-form-factor>
      <wavelength>17000</wavelength>
      <serial-no>LTA112051000713</serial-no>
      <date-code>120202</date-code>
      <temperature>38</temperature>
      <voltage>3291.9</voltage>
      <current>7.138</current>
      <tx-power>0.0</tx-power>
      <rx-power>872.9</rx-power>
    </qsfp>
  </interface>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-netconf-client-capabilities

Retrieves the session details, vendor details, IP details, time etc for all connected NETCONF clients.

## Resource URIs

URI	Description
<base_URI>/operations/get-netconf-client-capabilities	Retrieves the vendor information of all the NETCONF clients.

## Parameters

*session-id*

Displays the session ID of the NETCONF client session.

*user-name*

Displays the login name of the user for the NETCONF client session.

*vendor*

Displays the vendor name of the NETCONF client session.

*product*

Displays the product name of the NETCONF client session.

*version*

Displays the product version of the NETCONF client session.

*identity*

Displays the identity of the NETCONF client session.

*host-ip*

Displays the IP address of NETCONF client session.

*time*

Displays the login time of NETCONF client session.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-netconf-client-capabilities

### Request Body

```
<get-netconf-client-capabilities></get-netconf-client-capabilities>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-netconf-ext'>
  <session>
    <session-id>532</session-id>
    <user-name>admin</user-name>
    <vendor>BROCADE</vendor>
    <product>Network Advisor</product>
    <version>12.3.3 build 18</version>
    <identity>Administrator</identity>
    <af-type>IPV4</af-type>
    <host-ip>10.20.237.24</host-ip>
    <time>2015-01-12T11:02:42+00:00</time>
  </session>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-port-channel-detail

Retrieves the Link Aggregation Control Protocol (LACP) configuration parameters for all the port-channels in the system.

## Resource URIs

URI	Description
<base_URI>/operations/get-port-channel-detail	Retrieves the Link Aggregation Control Protocol (LACP) information for all port-channel.

## Parameters

*aggregator-id*

Displays the aggregator ID.

*aggregator-type*

Displays the aggregator type.

*aggregator-mode*

Displays the aggregator mode.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-port-channel-detail

### Request Body

```
<get-port-channel-detail></get-port-channel-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
<lacp>
<aggregator-id>1</aggregator-id>
<aggregator-type>standard</aggregator-type>
<aggregator-mode>static</aggregator-mode>
</lacp>
<lacp>
<aggregator-id>2</aggregator-id>
<aggregator-type>standard</aggregator-type>
<aggregator-mode>static</aggregator-mode>
</lacp>
<has-more>>false</has-more>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-portchannel-info-by-intf

Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port.

## Resource URIs

URI	Description
<base_URI>/operations/get-portchannel-info-by-intf	Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port.

## Parameters

### *interface-type*

Displays the interface type.

### *interface-name*

Displays the interface name.

### *actor-port*

Displays the actor port number.

### *system-priority*

Displays the System Priority.

### *actor-system-id*

Displays the Actor system ID.

### *partner-oper-priority*

Displays the partner operational priority.

### *partner-system-id*

Displays the Partner system ID.

### *actor-priority*

Displays the Actor Priority.

### *admin-key*

Displays the Admin key.

### *oper-key*

Displays the Operational key.

### *receive-machine-state*

Displays the state of the 'Receive Machine'.

### *periodic-transmission-machine-state*

Displays the state of the 'Periodic Transmission machine'.

### *mux-machine-state*

Displays the state of the 'Mux machine'.

### *admin-state*

Displays the Admin state.

### *oper-state*

Displays the Operational state.



*partner-oper-state*  
Displays the Partner Operational state.

*partner-oper-port*  
Displays the Partner Operational port.

*actor-chip-number*  
Displays the actor chip number.

*actor-max-deskew*  
Displays the actor maximum deskew.

*partner-chip-number*  
Displays the actor chip number.

*partner-max-deskew*  
Displays the partner maximum deskew.

*actor-brcd-state*  
Displays the actor BRCD trunk state.

*partner-brcd-state*  
Displays the partner BRCD trunk state.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-portchannel-info-by-intf

### Request Body

```
<get-portchannel-info-by-intf></get-portchannel-info-by-intf>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
  <lacp>
    <interface-type>port-channel</interface-type>
    <interface-name>122/8/1</interface-name>
    <actor-port>524204122304</actor-port>
    <system-priority>32255</system-priority>
    <actor-system-id>01:e0:52:00:20:00</actor-system-id>
    <partner-oper-priority>1</partner-oper-priority>
    <partner-system-id>00:00:00:00:00:01</partner-system-id>
    <actor-priority>32768</actor-priority>
    <admin-key>40</admin-key>
    <oper-key>40</oper-key>
    <receive-machine-state>current</receive-machine-state>
    <periodic-transmission-machine-state>slow-periodic</periodic-transmission-machine-state>
    <mux-machine-state>collecting-distributing</mux-machine-state>
    <admin-state>activity aggregation defaulted</admin-state>
    <oper-state>activity aggregation synchronization collecting distributing</oper-state>
    <partner-oper-state>activity aggregation synchronization collecting distributing</partner-oper-
state>
    <partner-oper-port>1</partner-oper-port>
  </lacp>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-stp-brief-info

Displays spanning tree information.

## Resource URIs

URI	Description
<base_URI>/operations/get-stp-brief-info	Displays spanning tree information.

## Parameters

### *stp-mode*

Displays the type of the Spanning Tree Protocol configured on the switch.

### *priority*

Displays the Bridge priority.

### *hello-time*

Displays the interval between two transmissions of BPDU packets sent by the Root Bridge to tell all other switches that it is indeed the Root Bridge (1 to 10 sec).

### *max-age*

Displays the Max Age may be set to ensure that old information does not endlessly circulate through redundant paths in the network, preventing the effective propagation of new information (6 to 40 sec).

### *forward-delay*

Displays the port on the Switch spends this time in the listening state while moving from the blocking state to the forwarding state (4 to 30 sec).

### *interface-type*

Displays the interface type.

### *interface-name*

Displays the interface name.

### *spanningtree-enabled*

Enables spanning tree.

### *if-index*

Displays the interface index.

### *interface-id*

Displays the interface ID.

### *if-role*

Displays the interface role.

### *if-state*

Displays the interface state.

### *external-path-cost*

Designated external path cost.

### *internal-path-cost*

Designated internal path cost.

*configured-path-cost*  
Displays the configured path cost.

*designated-port-id*  
Displays the designated port ID.

*port-priority*  
Displays the Port priority.

*designated-bridge-id*  
Displays the designated bridge ID.

*port-hello-time*  
Displays the Port hello time.

*forward-transitions-count*  
Displays the number of forward transitions.

*received-stp-type*  
Displays the received (rx) STP type.

*transmitted-stp-type*  
Displays the transmitted (tx) STP type.

*edge-port*  
Displays the edge port mode.

*auto-edge*  
Displays the auto edge.

*admin-edge*  
Displays the admin edge.

*edge-delay*  
Displays the edge delay.

*configured-root-guard*  
Displays the configured root guard.

*oper-root-guard*  
Displays the operational root guard.

*boundary-port*  
Displays the Is boundary.

*oper-bpdu-guard*  
Displays the operational BPDU guard.

*oper-bpdu-filter*  
Displays the operational BPDU filter.

*link-type*  
Displays the spanning tree link type.

*rx-bpdu-count*  
Displays the received BPDU count.

*tx-bpdu-count*  
Displays the transmitted BPDU count.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-stp-brief-info

### Request Body

```
<get-stp-brief-info></get-stp-brief-info>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <spanning-tree-info>
    <stp-mode>stp</stp-mode>
    <stp>
      <root-bridge>
        <priority>32768</priority>
        <bridge-id>8000.01e0.5200.0193</bridge-id>
        <hello-time>2</hello-time>
        <max-age>20</max-age>
        <forward-delay>15</forward-delay>
      </root-bridge>
      <bridge>
        <priority>32768</priority>
        <bridge-id>8000.01e0.5200.0193</bridge-id>
        <hello-time>2</hello-time>
        <max-age>20</max-age>
        <forward-delay>15</forward-delay>
      </bridge>
    </stp>
  </spanning-tree-info>
  <has-more>false</has-more>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-stp-mst-detail

Retrieves RPC to return MSTP details.

## Resource URIs

URI	Description
<base_URI>/operations/get-stp-mst-detail	Retrieves RPC to return MSTP details.

## Parameters

*cist-root-id*

Displays the CIST Root ID.

*cist-bridge-id*

Displays the CIST bridge ID.

*cist-reg-root-id*

Displays the CIST regional root ID.

*root-forward-delay*

Displays the CIST root forward delay.

*hello-time*

Displays the CIST root hello time.

*max-age*

Displays the CIST root maximum age.

*max-hops*

Displays the hops the BPDU will be valid.

*migrate-time*

Displays the migration time.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*spanningtree-enabled*

Displays if the spanning tree enabled.

*if-index*

Displays the interface index.

*interface-id*

Displays the interface ID.

*if-role*

Displays the interface role.

*if-state*

Displays the interface state.

*internal-path-cost*  
Displays the designated internal path cost.

*external-path-cost*  
Displays the designated external path cost.

*configured-path-cost*  
Displays the configured path cost.

*designated-port-id*  
Displays the designated port ID.

*port-priority*  
Displays the port priority.

*designated-bridge-id*  
Displays the designated bridge ID.

*forward-transitions-count*  
Displays the number of forward transitions.

*port-hello-time*  
Displays the Port hello time.

*received-stp-type*  
Displays the received (rx) stp type.

*transmitted-stp-type*  
Displays the transmitted (tx) stp type.

*edge-port*  
Displays the Edge Port mode.

*auto-edge*  
Displays the Auto Edge.

*edge-delay*  
Displays the Edge delay.

*admin-edge*  
Displays the Admin Edge.

*boundary-port*  
Displays the Is boundary.

*configured-root-guard*  
Displays the configured root guard.

*oper-root-guard*  
Displays the operational root guard.

*oper-bpdu-guard*  
Displays the operational BPDU guard.

*oper-bpdu-filter*  
Displays the operational BPDU filter.

*link-type*  
Displays the point-to-point - enable rapid transition.

*rx-bpdu-count*

Displays the received BPDU count.

*tx-bpdu-count*

Displays the transmitted BPDU count.

*instance-id*

Displays the instance ID of the last received spanning-tree instance.

*msti-root-id*

Displays the MSTI Root ID.

*msti-bridge-id*

Displays the MSTI bridge ID.

*msti-bridge-priority*

Displays the MSTI bridge priority.

*vlan-id*

Displays the VLAN ID.

## Usage Guidelines

Only POST operation is supported.



## Examples

### URI

http://host:80/rest/operations/get-stp-mst-detail

### Request Body

```
<get-stp-mst-detail></get-stp-mst-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-xstp-ext'>
  <cist>
    <cist-root-id>8000.01e0.5200.05bf</cist-root-id>
    <cist-bridge-id>8000.01e0.5200.05bf</cist-bridge-id>
    <cist-reg-root-id>8000.01e0.5200.05bf</cist-reg-root-id>
    <root-forward-delay>15</root-forward-delay>
    <hello-time>2</hello-time>
    <max-age>20</max-age>
    <max-hops>20</max-hops>
    <migrate-time>3</migrate-time>
    <port>
      <interface-type>port-channel</interface-type>
      <interface-name>2/0/12</interface-name>
      <spanningtree-enabled>>false</spanningtree-enabled>
      <if-index>403046411</if-index>
      <interface-id>32768</interface-id>
      <if-role>disabled</if-role>
      <if-state>forwarding</if-state>
      <internal-path-cost>0</internal-path-cost>
      <external-path-cost>0</external-path-cost>
      <configured-path-cost>20000000</configured-path-cost>
      <designated-port-id>0</designated-port-id>
      <port-priority>128</port-priority>
      <designated-bridge-id>0000.0000.0000.0000</designated-bridge-id>
      <forward-transitions-count>0</forward-transitions-count>
      <port-hello-time>2</port-hello-time>
      <received-stp-type>none</received-stp-type>
      <transmitted-stp-type>mstp</transmitted-stp-type>
      <edge-port>off</edge-port>
      <auto-edge>no</auto-edge>
      <edge-delay>3</edge-delay>
      <admin-edge>no</admin-edge>
      <boundary-port>yes</boundary-port>
      <configured-root-guard>off</configured-root-guard>
      <oper-root-guard>off</oper-root-guard>
      <oper-bpdu-guard>off</oper-bpdu-guard>
      <oper-bpdu-filter>off</oper-bpdu-filter>
      <link-type>point-to-point</link-type>
      <rx-bpdu-count>0</rx-bpdu-count>
      <tx-bpdu-count>0</tx-bpdu-count>
    </port>
  </cist>
  <msti>
    <instance-id>1</instance-id>
    <msti-root-id>8001.01e0.5200.05bf</msti-root-id>
    <msti-bridge-id>8001.01e0.5200.05bf</msti-bridge-id>
    <msti-bridge-priority>32769</msti-bridge-priority>
    <port>
      <interface-type>port-channel</interface-type>
      <interface-name>2/0/12</interface-name>
      <spanningtree-enabled>>false</spanningtree-enabled>
      <if-index>403046411</if-index>
      <interface-id>32768</interface-id>
```

```

<if-role>disabled</if-role>
<if-state>forwarding</if-state>
<internal-path-cost>0</internal-path-cost>
<configured-path-cost>20000000</configured-path-cost>
<designated-port-id>0</designated-port-id>
<port-priority>128</port-priority>
<designated-bridge-id>0000.0000.0000</designated-bridge-id>
<forward-transitions-count>0</forward-transitions-count>
<received-stp-type>none</received-stp-type>
<transmitted-stp-type>mstp</transmitted-stp-type>
<edge-port>off</edge-port>
<auto-edge>no</auto-edge>
<edge-delay>3</edge-delay>
<admin-edge>no</admin-edge>
<boundary-port>yes</boundary-port>
<rx-bpdu-count>0</rx-bpdu-count>
<tx-bpdu-count>0</tx-bpdu-count>
</port>
</msti>
<has-more>>false</has-more>
</output>

```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-system-uptime

Retrieves the time since this managed entity was last re-initialized.

## Resource URIs

URI	Description
<base_URI>/operations/get-system-uptime	Retrieves the time since this managed entity was last re-initialized.

## Parameters

*days*

Displays the number of days the managed node is up since its last re-initialization.

*hours*

Displays the number of hours the managed node is up since its last re-initialization.

*minutes*

Displays the number of minutes the managed node is up since its last re-initialization.

*seconds*

Displays the number of seconds the managed node is up since its last re-initialization.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-system-uptime

### Request Body

```
<get-system-uptime></get-system-uptime>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-system'>
  <show-system-uptime>
    <days>0</days>
    <hours>5</hours>
    <minutes>53</minutes>
    <seconds>4</seconds>
  </show-system-uptime>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# get-vlan-brief

Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN.

## Resource URIs

URI	Description
<base_URI>/operations/get-vlan-brief	Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN.

## Parameters

- vlan-id*  
Displays the VLAN ID.
- vlan-type*  
Displays the VLAN type.
- vlan-name*  
Displays the administrative name of the VLAN.
- vlan-state*  
Displays the operational state of the VLAN.
- last-vlan-id*  
Displays the last VLAN record that has been fetched.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/get-vlan-brief

### Request Body

```
<get-vlan-brief></get-vlan-brief>
```

If the entire information cannot be retrieved in a single execution, the last line of output shows `has-more=true`. In such cases, the remaining information can be retrieved using "last-rcvd-interface", as shown in the following request body.

```
<get-vlan-brief xmlns="urn:brocade.com:mgmt:brocade-interface-ext">
  <last-rcvd-vlan-id>1</last-rcvd-vlan-id>
</get-vlan-brief>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <configured-vlans-count>1</configured-vlans-count>
  <provisioned-vlans-count>1</provisioned-vlans-count>
  <unprovisioned-vlans-count>0</unprovisioned-vlans-count>
  <vlan>
    <vlan-id>1</vlan-id>
    <vlan-type>static</vlan-type>
    <vlan-name>default</vlan-name>
    <vlan-state>suspend</vlan-state>
  </vlan>
  <last-vlan-id>1</last-vlan-id>
  <has-more>false</has-more>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# reload

Reloads the device.

## Resource URIs

URI	Description
<base_URI>/operations/reload	Reloads the device.

## Usage Guidelines

Only POST operation is supported.

## Examples

### *URI*

http://host:80/rest/operations/reload

### *Request Body*

<reload></reload>

### *Response Body*

None

## History

Release version	Command history
17s.1.00	This API call was introduced.

# set-http-application-url

Updates the HTTP application URL.

## Resource URIs

URI	Description
<base_URI>/operations/set-http-application-url	Update HTTP application URL.

## Parameters

### *status-code*

Displays the status code as URL updated successfully - 0, Error not able to update configuration - 1 or Error not able to remove configuration - 2.

### *status-string*

Displays the error in string format.

## Usage Guidelines

Only POST operation is supported.

## Examples

### *URI*

http://host:80/rest/operations/set-http-application-url

### *Request Body*

```
<set-http-application-url>
  <config-http-app-url>
    <url>www.google.com</url>
    <op-type>0</op-type>
  </config-http-app-url>
</set-http-application-url>
```

### *Response Body*

```
<output xmlns='urn:brocade.com:mgmt:brocade-http-redirect'>
  <status-code>0</status-code>
  <status-string>Success</status-string>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.



# show-clock

Retrieves the current time for the cluster or specified switch.

## Resource URIs

URI	Description
<base_URI>/operations/show-clock	Retrieves current time for the cluster or specified switch.

## Parameters

*current-time*

Displays the switch date and time.

*timezone*

Displays the region/city or region/state/city.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-clock

### Request Body

```
<show-clock></show-clock>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-clock'>
  <clock-time>
    <current-time>2017-03-17T05:13:28+00:00</current-time>
    <timezone>Etc/GMT</timezone>
  </clock-time>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# show-firmware-version

Retrieves the firmware version information.

## Resource URIs

URI	Description
<base_URI>/operations/show-firmware-version	Retrieves the firmware version information.

## Parameters

*os-name*

Displays the name of the Firmware version. Example: NOS, FOS, SLX-OS, and so on.

*os-version*

Displays the version of the Firmware.

*copy-right-info*

Displays the copyright information of the Firmware.

*build-time*

Displays the time information on the build of Firmware.

*firmware-full-version*

Displays the full version string of Firmware.

*control-processor-vendor*

Displays the information on the control processor.

*control-processor-chipset*

Displays the information on the control processor.

*control-processor-memory*

Displays the information on the control processor.

*slot-no*

Displays the slot number.

*node-instance-no*

Displays the instance number.

*Node-type*

Displays the node type.

*ls-active-cp*

Indicates whether the control processor is active or not.

*application-name*

Displays the name of the application.

*primary-version*

Indicates the primary version.

*secondary-version*

Indicates the secondary version.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-firmware-version

### Request Body

```
<show-firmware-version></show-firmware-version>
```

### Response Body

```
<show-firmware-version>
  <os-name>SLX-OS Operating System Software</os-name>
  <os-version>17.1.0</os-version>
  <copy-right-info>Copyright (c) 1995-2014 Brocade Communications Systems, Inc.</copy-right-info>
  <build-time>Thu Mar 16 08:12:34 2017
</build-time>
  <firmware-full-version>17r.1.00rajans_nos_fusion_dev_031517_2211</firmware-full-version>
  <control-processor-vendor></control-processor-vendor>
  <control-processor-chipset></control-processor-chipset>
  <control-processor-memory>7962 MB</control-processor-memory>
  <node-info>
    <slot-no>0</slot-no>
    <node-instance-no>1</node-instance-no>
    <node-type>type-mm</node-type>
    <firmware-version-info>
      <application-name>NOS</application-name>
      <primary-version>17r.1.00rajans_nos_fusion_dev_031517_2211</primary-version>
      <secondary-version>17r.1.00rajans_nos_fusion_dev_031517_2211</secondary-version>
    </firmware-version-info>
  </node-info>
</show-firmware-version>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# show-ntp

Retrieves NTP server information.

## Resource URIs

URI	Description
<base_URI>/operations/show-ntp	Retrieves NTP server information.

## Parameters

*LOCL*

Indicates whether the LOCL is true or false.

## Usage Guidelines

Only POST operation is supported.

## Examples

*URI*

http://host:80/rest/operations/show-ntp

*Request Body*

```
<show-ntp></show-ntp>
```

*Response Body*

```
<node-active-server>
  <LOCL>true</LOCL>
</node-active-server>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# show-raslog

Retrieves the entries of RASLOG.

## Resource URIs

URI	Description
<base_URI>/operations/show-raslog	Retrieves the entries of RASLOG.

## Parameters

### *number-of-entries*

Displays the number of recent events to be fetched from the RASLOG entries.

### *index*

Displays the sequence number for the message.

### *message-id*

Displays the message identifier.

### *date-and-time-info*

Displays the date and time of the message. The format is: YYYY-MM-DD/HH:MM:SS.SSSS (micro seconds).

### *severity*

Displays the severity of the message. Valid values include: INFO, WARNING, ERROR, and CRITICAL.

### *log-type*

Specifies if the message is a SYSTEM or DCE log.

### *repeat-count*

Displays the number of times the particular event has occurred.

### *message*

Displays the textual description of the event.

### *message-flag*

Displays the type of the message.

### *switch-or-chassis-name*

Displays the switch name or chassis name for the generator of the message..

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-raslog

### Request Body

```
<show-raslog></show-raslog>
```

The API can be used to retrieve some number of last entries by providing the following tags as in the following request body.

```
<show-raslog xmlns="urn:brocade.com:mgmt:brocade-ras-ext">
  <number-of-latest-events>1</number-of-latest-events>
</show-raslog>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-all-raslog>
    <number-of-entries>1151</number-of-entries>
    <raslog-entries>
      <index>168099840</index>
      <message-id>SEC-1206</message-id>
      <date-and-time-info>2006/03/18-07:23:03:15</date-and-time-info>
      <severity>unknown</severity>
      <log-type>system</log-type>
      <repeat-count>1</repeat-count>
      <message>Login information: User [admin via telnet] Last Successful Login Time : Thu Aug 18
02:19:13 2016.</message>
      <message-flag>unknown</message-flag>
      <switch-or-chassis-name>SLX9850-4</switch-or-chassis-name>
    </raslog-entries>
  </show-all-raslog>
</output>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# show-support-save-status

Retrieves the information on the status of a recent support save request.

## Resource URIs

URI	Description
<base_URI>/operations/show-support-save-status	Retrieves the information on the status of a recent support save request.

## Parameters

*status*

Displays the status of recent support save.

*message*

Displays the textual description of status of recent support save.

*percentage-of-completion*

Displays the value of percentage of completion.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-support-save-status

http://host:80/rest/operations/show-support-save-status

### Request Body

```
<show-support-save-status></show-support-save-status>
```

### Response Body

```
<show-support-save-status>
  <status>unknown</status>
  <message>supportsave is not running.
</message>
  <percentage-of-completion>0</percentage-of-completion>
</show-support-save-status>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.



# show-system-info

Retrieves the system information.

## Resource URIs

URI	Description
<base_URI>/operations/show-system-info	Retrieves the system information.

## Parameters

*stack-mac*

Displays the MAC address of the switch.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-system-info

### Request Body

```
<show-system-info></show-system-info>
```

### Response Body

```
<show-system-info>
  <stack-mac>00:10:ce:7f:38:1e</stack-mac>
</show-system-info>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.

# show-system-monitor

Retrieves the overall status for a selected switch.

## Resource URIs

URI	Description
<base_URI>/operations/show-system-monitor	Retrieves the overall status for a selected switch.

## Parameters

*switch-name*

Displays the name of the switch.

*switch-ip*

Displays the IP address of the switch.

*switch-state*

Displays the switch status based on components.

*switch-state-reason*

Displays the component reason for switch status.

*report-time*

Displays the switch report time stamp.

*component-name*

Displays the component name.

*component-state*

Displays the component status based on thresholds.

*port-area*

Displays the port identifier.

*port-name*

Displays the port name.

*port-state*

Displays the port state.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/show-system-monitor

### Request Body

```
<show-system-monitor></show-system-monitor>
```

### Response Body

```
<switch-status>
  <switch-name>SLX</switch-name>
  <switch-ip>10.24.12.125</switch-ip>
  <switch-state>state-healthy</switch-state>
  <switch-state-reason>Switch Status is HEALTHY.
</switch-state-reason>
  <report-time>2017-03-17T05:11:58+00:00</report-time>
  <component-status>
    <component-name>Power supplies monitor</component-name>
    <component-state>state-healthy</component-state>
  </component-status>
  <component-status>
    <component-name>Temperatures monitor</component-name>
    <component-state>state-healthy</component-state>
  </component-status>
  <component-status>
    <component-name>Fans monitor</component-name>
    <component-state>state-healthy</component-state>
  </component-status>
  <component-status>
    <component-name>Flash monitor</component-name>
    <component-state>state-healthy</component-state>
  </component-status>
</switch-status>
```

## History

Release version	Command history
17s.1.00	This API call was introduced.