

# Extreme SLX-OS REST API Guide, 18x.1.00

Supporting the ExtremeSwitching SLX 9030 Switches

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# Preface

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This section discusses the conventions used in this guide, ways to provide feedback, additional help, and other Extreme Networks® publications.

## Conventions

This section discusses the conventions used in this guide.

## 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. Identifies document titles.

Format	Description
Courier font	Identifies CLI output.
	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.
[ ]	Syntax components displayed within square brackets are optional.  Default responses to system prompts are enclosed in square brackets.
{ x   y   z }	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one of the options.
x   y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element, for example, <i>member[member...]</i> .
\	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.

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- Call GTAC** For immediate support: 1-800-998-2408 (toll-free in U.S. and Canada) or +1 408-579-2826. For the support phone number in your country, visit: [www.extremenetworks.com/support/contact](http://www.extremenetworks.com/support/contact)

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

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

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3. Select the products for which you would like to receive notifications.

### NOTE

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

4. Click **Submit**.

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Please 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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## Supported hardware and software

The following platforms are supported by this release:

- ExtremeSwitching SLX 9030 Series



# Using the Extreme SLX-OS REST API

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## Before you begin

Before using the Extreme SLX-OS REST API, obtain a username and password for accessing SLX-OS through the REST API. By default, REST API is enabled on Extreme SLX-OS devices. You cannot disable it. In addition to the cURL agent, you can use tools such as Postman or Advanced REST Client to access REST API.

## Transport protocol requirements

REST API requires the following transport protocols.

- The REST API server is supported over HTTP without the TLS. To support data integrity and confidentiality, REST API requires HTTPS.
- REST API supports the "https" URI scheme, and SLX-OS uses the IANA assigned default port 443.
- The X.509v3 based certificate is used for establishing the connection between server and client.
- The X.509 certificate must be used by the client to verify the integrity of the server's TLS certificate. The REST API client must check the identity of the server according to Section 6 of [RFC6125].
- The REST API server must authenticate client access to any protected resource. If the REST API client is not authenticated, the server must send an HTTP response with "401 Unauthorized". The error-tag value "access-denied" is used in this case.

The following is an HTTPS configuration on an SLX device.

```
on SLX:
crypto key label mykey rsa modulus 2048
crypto ca trustpoint myca
keypair mykey
end
```

```
crypto ca authenticate myca directory /root/<directory>/certs file ca.cert.pem host <server ip> protocol
SCP user root password pass
crypto ca enroll myca common extreme country US directory /root/<directory> host <server ip> locality SJ
organization Extreme orgunit Eng protocol SCP state CA user root password pass
```

```
On Linux CA:
=====
cd <your directory>
```

```
openssl ca -policy policy_anything -extensions server_cert -out slx mgmt ip.pem -config openssl.cnf -
infile <slx mgmt ip>.csr
```

```
From the CA host, find out the certificate creation time. The time on the switch must be later than this
time, or the installation will not work:
date;
```

```

openssl x509 -noout -text -in <slx mgmt ip>.pem | grep 'Not Before'

On SLX:
=====
To adjust the time on the switch, run the following command. You might need to adjust for the time zone:
clock set yyyy-mm-ddThh:mm:ss

crypto ca import myca certificate directory <your directory> host <server ip> protocol SCP user root file
<slx mgmt ip>.pem password pass

copy running-config startup-config
show crypto key mypubkey
show crypto ca trustpoint
show crypto ca certificates
show running-config crypto key
show running-config crypto ca

```

## Logging in and out

You can log in to the device by entering the username and password or the session ID provided by the device 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.

The following is an example of cURL request for the Authentication-token.

```

device# curl -v -X GET -u admin:password http://host:80/rest/config/running/vlan/10 -H "Accept: application/
vnd.configuration.resource+xml" -k -v -H "Authentication-Token: d0xaUUp4cTx2dzlyfD9HaX09SC9yZEA/
eF5yUkpXa0M="

```

If you use cURL, the response header is sent with a different authentication-token as the REST API is a stateless protocol. However, if you use a third-party tool or script and initiate a persistence session, you will receive the same Authentication-token under the session and response header.

There is no expiry for the authentication token or the user session. There is expiry for the HTTP session only, which is 180 seconds. The client will timeout if the server does not respond within 180 seconds. This also applies to the Authentication-token expiry.

For single persistent connection, there must be only one token. When the same token is reused, you can have maximum number of 100 requests in a persistent connection.

To log out from the device, you must delete the session created using the DELETE operation. The URI for deleting a session 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, base, configuration) including the metadata information.



For example, the following GET method with the Resource-Depth header and its value as 2 requests the client to retrieve the LDAP server.

```
GET /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
Resource-Depth: 2
```

The following response contains XML representation of the target resource.

```
HTTP/1.1 200 OK
Date: 2014-06-24 10:31:15
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Type: application/vnd.configuration.resource+xml
Content-Length: 705
Connection: close
<ldap-server xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/ldap-server">
  <host y:self="/rest/config/running/ldap-server/host/inetaddress">
    <hostname>inetaddress</hostname>
    <port>4</port>
    <retries>6</retries>
    <timeout>10</timeout>
    <basedn>test</basedn>
  </host>
  <host y:self="/rest/config/running/ldap-server/host/test">
    <hostname>test</hostname>
  </host>
  <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>
</ldap-server>
```

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/1.1 201 Created
Date: Tue, 24 Jun 2014 10:38:15 GMT
Server: NOS 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

```

```

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 2014 11:03:55 GMT
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

```
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 2014 11:15:48 GMT
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

```
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 2014 10:50:33 GMT
Server: NOS Wave WWW
Cache-control: private, no-cache, must-revalidate, proxy-revalidate
Content-Length: 0
Content-Type: text/html
```

```
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.
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.
application/vnd.base.resource+json	Represents the high-level base resources such as configuration datastore and operational state resource.
application/vnd.configuration.resource+json	Represents resources defined for the configuration command derived from a YANG module.
application/vnd.operational-state.resource+json	Represents the operational-state resources defined in the YANG model
application/vnd.operational-state.resource+json	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 application/vnd.configuration.resource+json application/vnd.operations.resource+json
PUT	application/vnd.configuration.resource+xml application/vnd.configuration.resource+json
PATCH	application/vnd.configuration.resource+xml application/vnd.configuration.resource+json
DELETE	application/vnd.configuration.resource+xml application/vnd.configuration.resource+json

For more information about the media types, refer to the [Media types](#) on page 22 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 Extreme REST API requests that return data support the XML and JASON 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 Default value:

## 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 Extreme REST API requests that return data support the XML and JSON format.

## With-default header

The with-default header takes value all . This is used to get the running configuration of the configured along with default values of unconfigured resource. The following is an example of the with-default header.

Request Body

```
curl -v -X GET -u admin:password https://host/rest/config/running/router/mpls -H "Resource-Depth: 10" -k -H "With-Default: all"
```

Response body

```
<mpls xmlns="urn:extreme.com:mgmt:extreme-mpls" xmlns:y="http://extreme.com/ns/rest" y:self="/rest/config/running/router/mpls">
  <lsp-xc-traps y:self="/rest/config/running/router/mpls/lsp-xc-traps">
    <enable default="true" ></enable>
  </lsp-xc-traps>
  <lsp y:self="/rest/config/running/router/mpls/lsp/lsp1">
    <lsp-name>lsp1</lsp-name>
  </lsp>
</mpls>
```



# 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



# Overview of the SLX-OS REST API

- REST API.....27
- Resources.....27

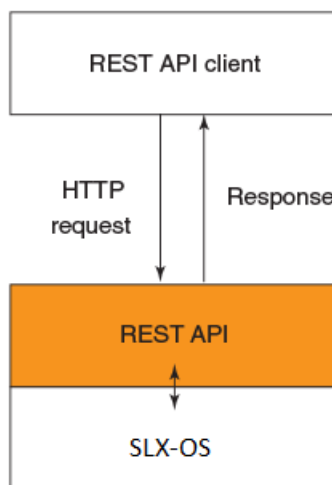
## REST API

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

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 HTTPS, and uses its standard methods to perform the operations on the resources. A web server embedded in the SLX-OS devices is used to serve the REST API to the clients.

FIGURE 1 SLX-OS REST API architecture



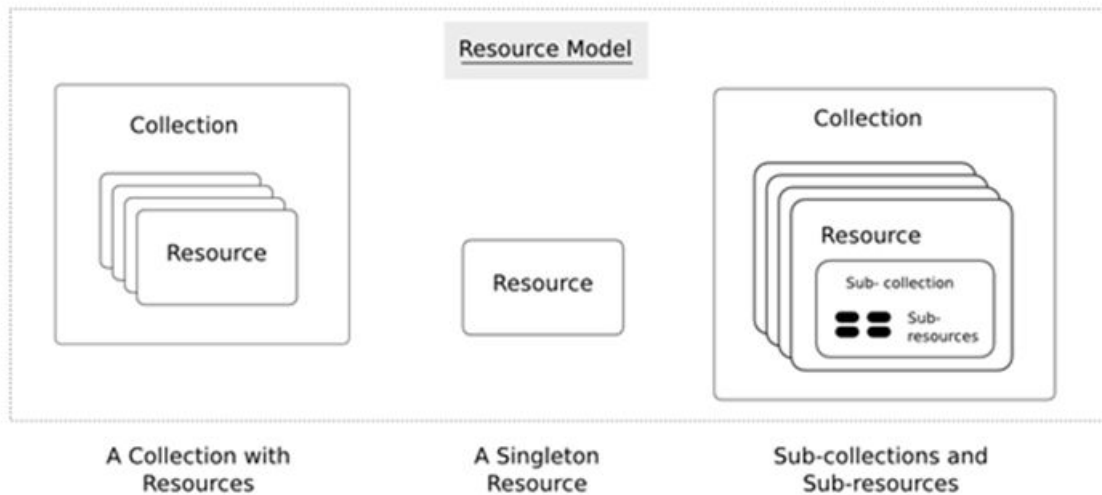
## Resources

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/running) and YANG-RPC Operations resource (/operational-state) as first-level child resources.

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

## Protocol support

The Network OS REST API supports HTTP and HTTPS.

The SLX-OS REST API supports HTTP and HTTPS.

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 Network OS server. All URIs accessing the same server use the same base URI.

- 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 Network 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

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/tengigabitethernet" identifies the collection of tengigabitethernet 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
- tengigabitethernet - Represents all the tengigabitethernet interfaces present in the running configuration

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>/operational-state` - To access the YANG-RPC operation 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

# 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 disabled command accounting
<base_URI>/config/running/aaa/accounting/exec	Enables or disables login accounting

PUT URIs	Payload	Description
<base_URI>/config/running/aaa/accounting/exec/default/start-stop/server-type	<server-type>{acc_srv_type}</server-type>	Enables login accounting.
<base_URI>/config/running/aaa/accounting/commands/default/start-stop/server-type	<server-type>{acc_srv_type}</server-type>	Enables command accounting.

### Parameters

#### *server-type*

Specifies server for accounting. Possible values are:

#### **None**

Disables login accounting.

#### **tacacs+**

Configures to use TACACS+ server.

#### **radius**

Configures to use radius server.

#### **exec**

Login accounting.

#### **default**

Sends the logged information to the default server.

#### **start-stop**

Sends a "start" accounting notice at the beginning of a process and a "stop" accounting notice at the end of a process. The "start" accounting record is sent in the background.

#### **server-type**

Specifies server for accounting : tacas+ or radius

## Usage Guidelines

GET, 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/accounting

### Request Body

None

### Response Body

```
<accounting y:self="/rest/config/running/aaa/accounting">
  <exec y:self="/rest/config/running/aaa/accounting/exec">
    <default 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>
  </exec>
  <commands y:self="/rest/config/running/aaa/accounting/commands">
    <default y:self="/rest/config/running/aaa/accounting/commands/default">
      <start-stop y:self="/rest/config/running/aaa/accounting/commands/default/start-stop">
        <server-type>tacacs+</server-type>
      </start-stop>
    </default>
  </commands>
</accounting>
```

## History

Release version	History
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include Command/Login Enable URIs for Mensa SLX 17r.1.00 release.



# aaa/authentication

Configures, retrieves, and modifies 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
16r.1.00	This API call was introduced.

# acl-policy

Configures, modifies, or retrieves ACL configuration.

## Resource URIs

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

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

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

PATCH URIs	Payload	Description
<base_URI>/config/running/acl-policy/allow-conflicting-rules	<allow-conflicting-rules />	Allows conflicting rules in a ACL table.
<base_URI>/config/running/acl-policy/allow-duplicate-rules	<allow-duplicate-rules />	Allows duplicate rules in a 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 a ACL table.
<base_URI>/config/running/acl-policy/allow-duplicate-rules	<allow-duplicate-rules>true</allow-duplicate-rules>	Allows duplicate rules in a 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 display whether duplicate rules are allowed.

### *URI*

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

### *Request Body*

None

### *Response Body*

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

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
16r.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. Refer to alias-config/alias for information
<base_URI>/config/running/alias-config/user	User alias. Refer to alias-config/user for information

## 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">
  <alias y:self="/rest/config/running/alias-config/alias/alias1"/>
  <user y:self="/rest/config/running/alias-config/user/user0"/>
</alias-config>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.



# banner

Configures, modifies, or retrieves banner messages.

## Resource URIs

URI	Description
<base_URI>/config/running/banner	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">
  <login>user1</login>
  <motd>Good Morning</motd>
  <incoming>yes</incoming>
</banner>
```

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/motd

**Request Body**

None

**Response Body**

None

## History

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.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 a bridge domain configuration information.
<base_URI>/config/running/bridge-domain /router-interface/%\e%/disallow-oar-acdisallow-oar-ac	Allows multiple attachment circuit (AC) endpoints on a virtual router interface that is configured for a VPLS instance.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/vc-id	Retrieves information about a virtual circuit with the specified ID.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/peer/{peer-ip}/load-balance	Retrieves load-balancing details.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/peer/{peer-ip}/cos	Sets the cos value in the range 0 to 7.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/statistics	Configures statistics.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/pw-profile	Sets the Pw-profile name. The maximum size is 64.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/bpdu-drop-enable	Enables bpdu-drop functionality.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id}, {bridge-domain-type}/local-switching	Configures local switching.

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.
<base_URI>/config/running/bridge-domain /router-interface/%\e%/disallow-oar-acdisallow-oar-ac		Allows multiple attachment circuit (AC) endpoints on a virtual router interface that is configured for a VPLS instance.

PUT URIs	Payload	Description
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/vc-id	<vc-id>{uint32}</vc-id>	Configures VC ID.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}/load-balance	<load-balance />	Configures load-balancing.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}/cos	<cos>{string}</cos>	Sets the cos value in the range 0 to 7.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/statistics	<statistics />	Configures statistics.
<base_URI>/rest/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>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/bpdu-drop-enable	<bpdu-drop-enable />	Enables bpdu-drop functionality.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/local-switching	<local-switching />	Configures local switching.

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.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}	<peer><load-balance /></peer>	Configures load balancing.
<base_URI>/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}	<peer><cos>{string}</cos></peer>	Configures COS.
<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><pw-profile>{common-def.name-string64}</pw-profile></bridge-domain>	Configures PW profile.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}	<bridge-domain><bpdu-drop-enable /></bridge-domain>	Enables BPDU drop functionality.
<base_URI>/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}	<bridge-domain><local-switching /></bridge-domain>	Enables local switching.

DELETE URIs
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/vc-id
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}/load-balance
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/peer/{peer-ip}/cos
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/statistics
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/logical-interface/ethernet/{lif-bind-id}

DELETE URIs
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/logical-interface/port-channel/{pc-lif-bind-id}
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/pw-profile
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/bpdu-drop-enable
/rest/config/running/bridge-domain/{bridge-domain-id},{bridge-domain-type}/local-switching

## Parameters

*bridge-domain-id*

The bridge domain ID.

*bridge-domain-type*

The bridge domain type.

**peer**

Specifies the peer.

*peer-ip*

The peer IP address.

*load-balance*

Specifies load balancing.

*lsp*

Specifies the LSP.

*logical-interface*

Specifies the logical interface.

*pw-profile*

Specifies the PW-profile.

*bpdu-drop-enable*

Specifies the BPDU drop enable feature.

*local-switching*

Specifies local switching.

## 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/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>
  <vc-id>200</vc-id>
  <peer y:self="/rest/config/running/bridge-domain/1%2Cp2mp/peer/10.10.10.10">
    <peer-ip>10.10.10.10</peer-ip>
    <load-balance>true</load-balance>
    <lsp>lsp10 lsp15</lsp>
  </peer>
  <logical-interface y:self="/rest/config/running/bridge-domain/1%2Cp2mp/
logical
  </logical-interface>
  <pw-profile>to-dc-connect</pw-profile>
  <bpdu-drop-enable>true</bpdu-drop-enable>
  <local-switching>true</local-switching>
</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
16r.1.00	This API call was introduced.
17r.1.00	Added URI for disallow-oar-ac.

# chassis

Configures, modifies, or retrieves the Chassis Virtual address.

## Resource URIs

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

GET URIs	Description
/rest/config/running/chassis	Configure Chassis Virtual address.
/rest/config/running/chassis/virtual-ip	Chassis Virtual IPv4 address
/rest/config/running/chassis/virtual-ipv6	Chassis Virtual IPv6 address

PATCH URIs	Payload	Description
/rest/config/running/chassis	<chassis><virtual-ip>(string)</virtual-ip></chassis>	Chassis Virtual IPv4 address
/rest/config/running/chassis	<chassis><virtual-ipv6>(string)</virtual-ipv6></chassis>	Chassis Virtual IPv6 address

PUT URIs	Payload	Description
/rest/config/running/chassis/virtual-ip	<virtual-ip>(string)</virtual-ip>	Chassis Virtual IPv4 address
/rest/config/running/chassis/virtual-ipv6	<virtual-ipv6>(string)</virtual-ipv6>	Chassis Virtual IPv6 address

DELETE URIs	Payload	Description
/rest/config/running/chassis/virtual-ip	<virtual-ip>(string)</virtual-ip>	Chassis Virtual IPv4 address
/rest/config/running/chassis/virtual-ipv6	<virtual-ipv6>(string)</virtual-ipv6>	Chassis Virtual IPv6 address

POST URIs	Payload	Description
/rest/config/running/chassis/virtual-ip	<virtual-ip>(string)</virtual-ip>	Chassis Virtual IPv4 address
/rest/config/running/chassis/virtual-ipv6	<virtual-ipv6>(string)</virtual-ipv6>	Chassis Virtual IPv6 address

## 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 of the PATCH operation to set 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 of the DELETE operation to remove virtual IPv4 address.

### *URI*

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

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.1.00	This API call was introduced.

# clock

Configures, modifies, or retrieves system time zone.

## Resource URIs

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

GET URIs	Description
/rest/config/running/clock	Configure System Timezone
/rest/config/running/clock/timezone	Timezone region or city. Regions are Africa, America, Antarctica, Arctic, Asia, Atlantic, Australia, Europe, Indian, and Pacific.

PATCH URIs	Payload	Description
/rest/config/running/clock	<clock><timezone>(string)</timezone></clock>	Modifies or updates the system time zone.

PUT URIs	Payload	Description
/rest/config/running/clock/timezone	<timezone>(string)</timezone>	Modifies or updates the system time zone.

DELETE URIs	Payload	Description
/rest/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*

```
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
16r.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}/member-vlan	Configures MCT member VLAN.

GET URIs	Description
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member-vlan	Configures 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 Layer2 interface.
<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}/deploy	Deploys the cluster.
<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}/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	Cluster client deploy.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-interfaces-shutdown	Disables the cluster client interfaces.

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	<member-vlan><add>{ui32-vlan-range}</add></member-vlan>	Configures MCT member VLAN and allows VLANs under MCT.
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/member-vlan	<member-vlan><remove>{ui32-vlan-range}</remove></member-vlan>	Removes a VLAN range that Xmit/Rx through the Layer2 interface.

PATCH URIs	Payload	Description
<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}	<designated-forwarder-hold-time>{uint16}</designated-forwarder-hold-time>	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>	Cluster client deploy.

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>	Cluster client deploy.
<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 Layer2 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.

DELETE URIs
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client/{client-name},{client-id}/deploy
<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}/client-interface/if-value
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/deploy

DELETE URIs
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/designated-forwarder-hold-time
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-isolation-strict
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}/client-interfaces-shutdown
<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
<base_URI>/config/running/cluster/{cluster-name},{cluster-id}

## Parameters

*designated-forwarder-hold-time*

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

## 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/{fusion-cluster-1},{1}/member-vlan

### Request Body

None

### Response Body

```
<member-vlan xmlns="urn:brocade.com:mgmt:brocade-mct" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/cluster/fusion-cluster-1%2C1/member-vlan">
<add>2-999,1001-2664</add>
</member-vlan>
```

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

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

### **URI**

http://host:80/rest/config/running/config/running/cluster/{fusion-cluster-1},{1}

### **Request Body**

```
<peer><peer-ip>99.99.99.99</peer-ip></peer>
```

### **Response Body**

None

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

### **URI**

http://host:80/rest/config/running/cluster/{fusion-cluster-1},{1}

### **Request Body**

None

### **Response Body**

None

## **History**

Release version	History
16r.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
16r.1.00	This API call was introduced.

# filter-change-update-delay

Configures, retrieves, and modifies 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 time.

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 time.

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/15

### *Request Body*

None

### *Response Body*

None

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

### *URI*

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

### *Request Body*

```
<filter-change-update-delay><filter-delay-value>15</filter-delay-value></filter-change-update-delay>
```

### *Response Body*

None

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

### *URI*

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

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.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	Connector. Refer to hardware/connector for information.
<base_URI>/config/running/hardware/connector-group	Connector group. Refer to hardware/connector-group for information.
<base_URI>/config/running/hardware/custom-profile	Configures customized hardware profiles. Refer to hardware/custom-profile for information.
<base_URI>/config/running/hardware/flexport	Option to change the Ethernet port to a Fibre Channel port. Refer to hardware/flexport for information.
<base_URI>/config/running/hardware/port-group	Port group. Refer to hardware/port-group for information.

GET URIs	Description
/rest/config/running/hardware	Hardware Management configuration
/rest/config/running/hardware/connector/(connectorName)	Configures a connector with the specified name
/rest/config/running/hardware/connector/(connectorName)/breakout	Configures a breakout connector
/rest/config/running/hardware/connector/(connectorName)/breakout/mode	Configures connector mode
/rest/config/running/hardware/port-group/(portGroupName)	Configures a port-group in a specified name
/rest/config/running/hardware/port-group/(portGroupName)/mode	Configures port-group mode

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

PATCH URIs	Payload	Description
/rest/config/running/hardware/connector/(connectorName)/breakout	<breakout><mode>(mode)</mode></breakout>	Configures a breakout connector
/rest/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
/rest/config/running/hardware/connector/(connectorName)/breakout	<breakout><mode>(mode)</mode></breakout>	Configures a breakout connector

## Parameters

*connector*

Configures a connector.

*connector-group*

Configures a connector group.

*custom-profile*

Configures customized hardware profiles.

*flexport*

Provides an option to change Ethernet port to FibreChannel port.

*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">
  <custom-profile xmlns="urn:brocade.com:mgmt:brocade-hardware" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/hardware/custom-profile"/>
  <connector y:self="/rest/config/running/hardware/connector/%22122/8/9%22"/>
  <flexport y:self="/rest/config/running/hardware/flexport/%2254/0/6%22"/>
  <connector-group y:self="/rest/config/running/hardware/connector-group/%2254/0/1%22"/>
  <port-group y:self="/rest/config/running/hardware/port-group/%2254/0/54%22"/>
</hardware>

<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
5.0.0	This API call was introduced.

Release version	History
16r.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
/rest/config/running/interface/{interface-type}/{interface-name}/delay-link-event	Configures a delay-link-event. Supported interface type: Ethernet.

GET URIs	Description
/rest/config/running/interface/{interface-type}/{interface-name}/delay-link-event	Configures a delay-link-event. Supported interface type: Ethernet.
/rest/config/running/interface/{interface-type}/{interface-name}/delay-link-event/delay-link-event-type	Delay link up event. Supported interface type: Ethernet.

PUT URIs	Payload	Description
/rest/config/running/interface/{interface-type}/{interface-name}/delay-link-event/delay-link-event-entry	<delay-link-event-entry>15</delay-link-event-entry>	Number of delay link event entry. Supported interface type: Ethernet.

DELETE URIs
/rest/config/running/interface/{interface-type}/{interface-name}/delay-link-event

## Parameters

*interface-type*

Supported interface type: Ethernet only.

*delay-link-event-entry*

Specifies the delay time. The range is from 1 to 200.

*delay-link-event-type*

Specifies the delay link event type. Valid values are **up** (up event), **down** (down event), or **both** (up or 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 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 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
16r.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 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	Enable 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 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 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 re-transmissions. 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 Extreme device relays an EAPRequest 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 Extreme device does not receive an EAP-response/identity frame from a client, the device waits 30 seconds, then retransmits the EAPrequest/identity frame. You can optionally change the amount of time the Extreme 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:Extreme.com:mgmt:Extreme-dot1x" xmlns:y="http://Extreme.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.

### **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.

### **URI**

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

### **Request Body**

None

### **Response Body**

None

## **History**

Release version	History
16r.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}/ip	<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>{enumeration}</shutdown>	Shuts down the interface.

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
16r.1.00	This API call was introduced.
17r.1.00	Added PATCH URI for address.

# 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. Valid interface types: Ethernet, Port-channel, Ve.  Supported interface types are: Port-Channel, Management, FortyGigabitEthernet, GigabitEthernet, HundredGigabitEthernet, TenGigabitEthernet, and VLAN.

## 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

IP access-list should be created before configuring 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

http://host:80/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%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/TenGigabitEthernet/%22195/1/7%22/ip/access-group/acl%2Cin">
  <ip-access-list>acl</ip-access-list>
  <ip-direction>in</ip-direction>
</access-group>
```

```
<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

http://host:80/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip

### Request Body

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

### Response Body

None

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

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

http://host:80/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/access-group/(ip-access-list)/(ip-direction)

### **Request Body**

None

### **Response Body**

None

## **History**

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

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

Configures 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. Ethernet and VE interfaces are supported. 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
16r.1.00	This API call was introduced.



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

Configures 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	Configures DHCP relay gateway. 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

*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
16r.1.00	This API call was introduced.

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

Configures 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

*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
16r.1.00	This API call was introduced.

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

Configures, modifies, or retrieves the Internet Group Management Protocol (IGMP).

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	Configures IGMP. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	Retrieves IGMP. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/last-member-query-interval	Retrieves the IGMP last-member query interval for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-interval	Retrieves the IGMP query interval for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-max-response-time	Retrieves the maximum response time for IGMP queries for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/immediate-leave	Removes a group from the IGMP table immediately following receipt of a Leave Group request. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/version	Retrieves the IGMP version on a device. Valid interface type: Ethernet.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	<static-group><igmpl3-sg-addr>{igmpl3-sg-addr}</igmpl3-sg-addr></static-group>	Configures the IGMP static group membership entries for a specific interface. Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	"<igmp><last-member-query-interval>{unit32}</last-member-query-interval></igmp>	Configures the IGMP last-member query interval for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	"<igmp><query-interval>{unit32}</query-interval></igmp>	Configures the IGMP query interval for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	<igmp><query-max-response-time>{unit32}</query-max-response-time></igmp>	Configures the maximum response time for IGMP queries for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	<igmp><immediate-leave>{enumeration}</immediate-leave></igmp>	Removes a group from the IGMP table immediately following receipt of a Leave Group request. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp	<igmp><version>{unit32}</version></igmp>	Configures the IGMP version on a device. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/last-member-query-interval	<last-member-query-interval>{unit32}</last-member-query-interval>	Configures the IGMP last-member query interval for an interface. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-interval	<query-interval>{unit32}</query-interval>	Configures the IGMP query interval for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-max-response-time	"<query-max-response-time>{unit32}</query-max-response-time>	Configures the maximum response time for IGMP queries for an interface. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/immediate-leave	"<immediate-leave>{enumeration}</immediate-leave>	Removes a group from the IGMP table immediately following receipt of a Leave Group request. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/version	"<version>{unit32}</version>	Configures the IGMP version on a device. Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/last-member-query-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-max-response-time
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/immediate-leave
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/version
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/static-group/{igmp3-sg-addr}
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-interval
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/query-max-response-time
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/immediate-leave
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/igmp/version

## Parameters

### *interface-type*

Valid interface type: **Ethernet** only.

### *last-member-query-interval*

Specifies the the IGMP 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.

## 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/ip/igmp

### Request Body

None

### Response Body

```
<igmp xmlns="urn:brocade.com:mgmt:brocade-igmp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%223/12%22/ip/igmp">
  <last-member-query-interval>2000</last-member-query-interval>
  <query-interval>200</query-interval>
  <query-max-response-time>20</query-max-response-time>
  <immediate-leave>true</immediate-leave>
  <version>3</version>
</igmp>
```

The following is an example of the POST operation to configure the IGMP static group membership entries for a specific interface.

### URI

http://host:80/rest/config/running/interface/Ve/11/ip/igmp

### Request Body

```
<static-group><igmp13-sg-addr>230.100.100.100</igmp13-sg-addr></static-group>
```

### 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/Ve/11/ip/igmp/last-member-query-interval

### Request Body

None

### Response Body

None



## History

Release version	History
16r.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. Supported interface types are: Ethernet and VE.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy	Configures PBR. Supported interface types are: Ethernet and VE.  Supported interface types are: Port-Channel, Management, FortyGigabitEthernet, GigabitEthernet, HundredGigabitEthernet, TenGigabitEthernet, and VLAN.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map	Enables PBR. Supported interface types are: Ethernet and VE.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map/route-map-name	Enables PBR. Supported interface types are: Ethernet and 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>	Enables PBR on an Ethernet interface or 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>	Enables PBR on an Ethernet interface or VE.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/policy/route-map/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/TenGigabitEthernet/%22195/1/7%22/ip/policy

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/TenGigabitEthernet/%22195/1/7%22/ip/policy">
  <route-map y:self="/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/policy/route-
map">
    <route-map-name>map12</route-map-name>
  </route-map>
</policy>
```

```
<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/TenGigabitEthernet/%22195/1/7%22/ip/policy/route-map

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 route map.

### **URI**

http://host:80/rest/config/running/interface/TenGigabitEthernet/%22195/1/7%22/ip/policy/route-map

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
5.0.0	This API call was introduced.

Release version	History
16r.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	Configures Proxy-ARP on the interface. 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 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 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
16r.1.00	This API call was introduced.

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

Configures Intermediate System-to-Intermediate System (IS-IS) routing at the interface level.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/router/isis	Configures IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/router	Displays IS-IS configuration. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/router/isis	Enables IS-IS. Valid interface types: Ethernet, Ve, Loopback.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/router/isis	<isis>{enumeration}</isis>	Enables IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/router	<isis>{enumeration}</isis>	Enables IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/router/isis

## 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/101/ip/router

### *Request Body*

None

### *Response Body*

```
<router xmlns="urn:brocade.com:mgmt:brocade-isis" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ve/101/ip/router">
  <isis>true</isis>
</router>
```

The following example uses the PUT option to configure IS-IS routing protocol.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/ip/router/isis

### *Request Body*

```
<isis>true</isis>
```

### *Response Body*

None

The following example uses the DELETE option to remove IS-IS routing protocol.

### *URI*

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

### *Request Body*

None

### *Response Body*

None



## History

Release version	History
16r.1.00	This API call was introduced.

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

Configures, retrieves, and modifies VRRPE.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ip/vrrp-extended	Configures VRRPE. 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, 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/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
16r.1.00	This API call was introduced.
17r.1.00	md5 URIs added.

# 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. Valid interface types: Ethernet, Port-channel, Ve  Supported interface types are: Port-Channel, Management, FortyGigabitEthernet, GigabitEthernet, HundredGigabitEthernet, TenGigabitEthernet, and VLAN.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list},{ip-direction}	Retrieves IPv6 access group. Valid interface types: Ethernet, Port-channel, Ve, Management.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group	<access-group><ipv6-access-list>{acl-name}</ipv6-access-list><ip-direction>{direction}</ip-direction></access-group>	Configures an IPv6 access group. Valid interface types: Ethernet, Port-channel, Ve.
<base_URI>/config/running/ipv6/receive	<access-group><acl-name>{acl-name}</acl-name></access-group>	Configures IPv6 Receive Access group.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/access-group/{ipv6-access-list},{ip-direction}
<base_URI>/config/running/ipv6/receive/access-group/{acl-name}

## Parameters

*ipv6-access-list*

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

*ip-direction*

Specifies the binding 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/TenGigabitEthernet/%22195/1/7%22/ipv6/access-group

http://host:80/rest/config/running/interface/Ethernet/%222/2%22/ipv6/access-group/traf\_ext3,in

### Request Body

None

### Response Body

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list" y:self="/rest/config/running/
interface/TenGigabitEthernet/%22195/1/7%22/ipv6/access-group/acl1%2Cin">
  <ipv6-access-list>acl1</ipv6-access-list>
  <ip-direction>in</ip-direction>
</access-group>
```

```
<access-group xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list" xmlns:y="http://brocade.com/ns/
rest" y:self="/rest/config/running/interface/Ethernet/%222/2%22/ipv6/access-group/traf_ext3%2Cin">
  <ipv6-access-list>traf_ext3</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/TenGigabitEthernet/%221/1/7%22/ipv6

http://host:80/rest/config/running/interface/Ethernet/%222/2%22/ipv6

### Request Body

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

<access-group>
<ipv6-access-list>traf_ext3</ipv6-access-list>
<ip-direction>in</ip-direction>
</access-group>
```

### Response Body

None

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

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

### **URI**

http://host:80/rest/config/running/interface/TenGigabitEthernet/%221/0/5%22/ipv6/access-group

http://host:80/rest/config/running/interface/Ethernet/%222/2%22/ipv6/access-group/traf\_ext3,in

### **Request Body**

None

### **Response Body**

None

## **History**

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

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

Configures 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-ifttype}</interface><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
16r.1.00	This API call was introduced.

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

Configures, modifies, or retrieves the Neighbor Discovery 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.

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
16r.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}/{interface-name}/ipv6/ospf/area	Displays the OSPF router area id. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/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	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	Displays cost for a specific OSPFv3 interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-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}/{interface-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}/{interface-name}/ipv6/ospf/network	Displays network type. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-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}/{interface-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}/{interface-name}/ipv6/ospf/authentication	Displays authentication for the interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/ospf/authentication/ipsec	Displays IPSEC authentication for the interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-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}/{interface-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}/{interface-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}/{interface-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}/{interface-name}/ipv6/ospf/retransmit-interval	Displays the retransmit interval. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-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.

## Usage Guidelines

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

## Examples

The following is an example of the PUT operation to configure a specific OSPFv3 interface to active.

### *URI*

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

### *Request Body*

```
<active>true</active>
```

### *Response Body*

None

## History

Release version	History
16r.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
16r.1.00	This API call was introduced.



# interface/{interface-type}/{interface-name}/ipv6/router/isis

Configures Intermediate System-to-Intermediate System (IS-IS) routing at the interface level.

## Resource URIs

URI	Description
<base_URI>rest/config/running/interface/{interface-type}/{interface-name}/ipv6/router/isis	Configures IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.

GET URIs	Description
<base_URI>rest/config/running/interface/{interface-type}/{interface-name}/ipv6/router	Displays IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>rest/config/running/interface/{interface-type}/{interface-name}/ipv6/router/isis	Enables IS-IS. Valid interface types: Ethernet, Ve, Loopback.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/router/isis	<isis>{enumeration}</isis>	Enables IS-IS. Valid interface types: Ethernet, Ve, Loopback.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/router	<isis>{enumeration}</isis>	Enables IS-IS. Valid interface types: Ethernet, Ve, Loopback.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/router/isis

## 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/ipv6/router

### *Request Body*

None

### *Response Body*

```
<router xmlns="urn:brocade.com:mgmt:brocade-isis" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/interface/Ethernet/%224/10%22/ipv6/router">
  <isis>true</isis>
</router>
```

The following example uses the PUT option to configure IS-IS routing protocol.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/ipv6/router/isis

### *Request Body*

```
<isis>true</isis>
```

### *Response Body*

None

The following example uses the DELETE option to remove IS-IS routing protocol.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/ipv6/router

### *Request Body*

None

### *Response Body*

None

# History

Release version	History
16r.1.00	This API call was introduced.

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

Configures, retrieves, and modifies VRRPE.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ipv6/vrrp-extended	Configures VRRPE. Allowed 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
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include md5 URIs.

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

Configures IS-IS routing protocol.

## Resource URIs

URI	Description
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	Configures IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.

GET URI	Description
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	Configures IS-IS routing protocol. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check	Authenticates incoming PDUs for LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1	Authenticate incoming PDUs for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1/disable	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-2	Authenticates incoming PDUs for Level-2 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-2/disable	Disables authentication of incoming PDUs for Level-2 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric	Configures IS-IS reverse metric at the router level. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/rev-metric-val	Configures IS-IS reverse metric value. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/whole-lan	Change metric for whole LAN. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/te-def-metric	Updates TE default metric sub-tlv. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode	Defines authentication mode. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5	HMAC-MD5 authentication. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5/level-1	Authentication mode for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5/level-2	Authentication mode for Level-2 LSPs, CSNP, PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-key/level-1	Auth-key for Level-1 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-key/level-2	Auth-key for Level-2 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello	Sets hello mode on this interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello/padding	Pad hello packets on this interface. Valid interface types: Ethernet, Ve, Loopback.

GET URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello/padding/disable	Disables padding hello packets on this interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-interval/level-1	Defines interval between hello PDUs. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-interval/level-2	Define interval between hello PDUs. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-multiplier/level-1	Define neighbor dead interval as multiplier of hello interval. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-multiplier/level-2	Define neighbor dead interval as multiplier of hello interval. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/circuit-type	Defines inter-area/intra area operation mode. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6	Interface ipv6 attributes for IS-IS. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6/metric/level-1	Interface ipv6 Metric for IS-IS. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6/metric/level-2	Interface ipv6 Metric for IS-IS.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/metric/level-1	Interface metric. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/point-to-point	Point-to-point interface for ISIS operation. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/passive	Passive interface for ISIS operation. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority	Router priority for ISIS. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority/level-1	Priority for Level-1 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority/level-2	Priority for Level-2 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ldp-sync	Sets LDP-SYNC operation mode on this interface. Valid interface types: Ethernet, Ve, Loopback.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<reverse-metric />	Configures IS-IS reverse metric at the router level. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<auth-key><interface-auth-key-level>level-1</interface-auth-key-level><interface-auth-key-str>hello</interface-auth-key-str></auth-key>	Auth-key for Level-1 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<hello-interval><interface-hello-interval-level>level-2</interface-hello-interval-level><interface-hello-interval-val>{unit32}</interface-hello-interval-val></hello-interval>	Defines interval between hello PDUs. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<hello-multiplier><interface-hello-multiplier-level>level-2</interface-hello-multiplier-level><interface-hello-multiplier-val>{unit32}</interface-hello-multiplier-val></hello-multiplier>	Defines neighbor dead interval as multiplier of hello interval. Valid interface types: Ethernet, Ve, Loopback.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6	<metric><interface-ipv6-metric-level>level-2</interface-ipv6-metric-level><interface-ipv6-metric-val>{unit32}</interface-ipv6-metric-val></metric>	Interface ipv6 Metric for IS-IS. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<metric><interface-metric-level>level-2</interface-metric-level><interface-metric-val>{unit32}</interface-metric-val></metric>	Interface metric. Valid interface types: Ethernet, Ve, Loopback.

PUT URIs	Payload	Description
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1/disable	<disable>{enumeration}</disable>	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-2/disable	<disable>{enumeration}</disable>	Disables authentication of incoming PDUs for Level-2 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/rev-metric-val	<rev-metric-val>{unit32}</rev-metric-val>	Configures IS-IS reverse metric value. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/whole-lan	<whole-lan>{enumeration}</whole-lan>	Changes metric for whole LAN. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/te-def-metric	<te-def-metric>{enumeration}</te-def-metric>	Updates TE default metric sub-tlv. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5/level-1	<level-1>{enumeration}</level-1>	Authentication mode for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5/level-2	<level-2>{enumeration}</level-2>	Authentication mode for Level-2 LSPs, CSNP, PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello/padding/disable	<disable>{enumeration}</disable>	Disables padding hello packets on this interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/circuit-type	<circuit-type>level-1</circuit-type>	Defines inter-area/intra area operation mode. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/point-to-point	<point-to-point>{enumeration}</point-to-point>	Point-to-point interface for ISIS operation. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/passive	<passive>{enumeration}</passive>	Passive interface for ISIS operation. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority/level-1	<level-1>{unit32}</level-1>	Priority for Level-1 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority/level-2	<level-2>{unit32}</level-2>	Priority for Level-2 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.



PATCH URIs	Payload	Description
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1	<level-1><disable>{enumeration}</disable></level-1>	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/rest<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-2	<level-2><disable>{enumeration}</disable></level-2>	Disables authentication of incoming PDUs for Level-2 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric	<reverse-metric><rev-metric-val>{string}</rev-metric-val></reverse-metric>	Configures IS-IS reverse metric value. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric	<reverse-metric><whole-lan>{enumeration}</whole-lan></reverse-metric>	Changes metric for whole LAN. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric	<reverse-metric><te-def-metric>{enumeration}</te-def-metric></reverse-metric>	Updates TE default metric sub-tlv. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5	<md5><level-1>{enumeration}</level-1></md5>	Authentication mode for Level-1 LSPs, CSNP, and PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5	<md5><level-2>{enumeration}</level-2></md5>	Authentication mode for Level-2 LSPs, CSNP, PSNP. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-key/level-1	<auth-key><interface-auth-key-str>hello</interface-auth-key-str></auth-key>	Auth-key for Level-1 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello/padding	<padding><disable>{enumeration}</disable></padding>	Disables padding hello packets on this interface. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-interval/level-1	<hello-interval><interface-hello-interval-val>{unit32}</interface-hello-interval-val></hello-interval>	Defines interval between hello PDUs. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-multiplier/level-2	<hello-multiplier><interface-hello-multiplier-val>{unit32}</interface-hello-multiplier-val></hello-multiplier>	Defines neighbor dead interval as multiplier of hello interval. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<isis><circuit-type>level-1</circuit-type></isis>	Defines inter-area/intra area operation mode. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6/metric/level-2	<metric><interface-ipv6-metric-val>{unit32}</interface-ipv6-metric-val></metric>	Interface ipv6 Metric for IS-IS. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<isis><point-to-point>{enumeration}</point-to-point></isis>	Point-to-point interface for ISIS operation. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<isis><passive>{enumeration}</passive></isis>	Passive interface for ISIS operation. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority	<priority><level-1>{unit32}</level-1></priority>	Priority for Level-1 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority	<priority><level-2>{unit32}</level-2></priority>	Priority for Level-2 ISIS Router. Valid interface types: Ethernet, Ve, Loopback.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis	<isis><ldp-sync>enable</ldp-sync></isis>	Sets LDP-SYNC operation mode on this interface. Valid interface types: Ethernet, Ve, Loopback.

## DELETE URIs

<base\_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-1/disable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-check/level-2/disable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/rev-metric-val
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/whole-lan
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/reverse-metric/te-def-metric
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-mode/md5/level-2
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/auth-key/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello/padding/
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello/padding/disable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/hello-interval/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/hello-interval/level-2
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-multiplier/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/hello-multiplier/level-2
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/circuit-type
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6/metric/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ipv6/metric/level-2
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/metric/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/point-to-point
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/passive
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority/level-1
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/priority/level-2
<base_URI>/config/running/interface/{interface-type}/{interface-name}/isis/ldp-sync

## 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/101/isis

### Request Body

None

### Response Body

```
<isis xmlns="urn:brocade.com:mgmt:brocade-isis" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/interface/Ethernet/%224/10%22/isis">
  <auth-check y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-check">
    <level-1 y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-check/level-1">
      <disable>true</disable>
    </level-1>
    <level-2 y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-check/level-2">
      <disable>true</disable>
    </level-2>
  </auth-check>
  <reverse-metric y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/reverse-metric">
    <rev-metric-val>2000</rev-metric-val>
    <whole-lan>true</whole-lan>
    <te-def-metric>true</te-def-metric>
  </reverse-metric>
  <auth-mode y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-mode">
    <md5 y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-mode/md5">
      <level-1>true</level-1>
      <level-2>true</level-2>
    </md5>
  </auth-mode>
  <auth-key y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-key/level-1">
    <interface-auth-key-level>level-1</interface-auth-key-level>
  </auth-key>
  <auth-key y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/auth-key/level-2">
    <interface-auth-key-level>level-2</interface-auth-key-level>
  </auth-key>
  <hello y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/hello">
    <padding y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/hello/padding">
      <disable>true</disable>
    </padding>
  </hello>
  <hello-interval y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/hello-interval/
level-1">
    <interface-hello-interval-level>level-1</interface-hello-interval-level>
  </hello-interval>
  <hello-multiplier y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/hello-multiplier/
level-1">
    <interface-hello-multiplier-level>level-1</interface-hello-multiplier-level>
  </hello-multiplier>
  <circuit-type>level-2</circuit-type>
  <ipv6 y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/ipv6">
    <metric y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/ipv6/metric/level-1">
      <interface-ipv6-metric-level>level-1</interface-ipv6-metric-level>
    </metric>
  </ipv6>
  <metric y:self="/rest/config/running/interface/Ethernet/%224/10%22/isis/metric/level-1">
    <interface-metric-level>level-1</interface-metric-level>
  </metric>
  <point-to-point>true</point-to-point>
  <passive>true</passive>
```

interface/{interface-type}/{interface-name}/isis

```
<priority y:self="/rest/config/running/interface/Ethernet/%24/10%22/isis/priority">
  <level-1>100</level-1>
  <level-2>99</level-2>
</priority>
</isis>
```

The following example uses the POST option to configure auth-key for Level-1 IS-IS router.

### URI

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

### Request Body

```
<auth-key><interface-auth-key-level>level-1</interface-auth-key-level><interface-auth-key-str>hello</interface-auth-key-str></auth-key>
```

### Response Body

None

The following example uses the DELETE option to remove authentication of incoming PDUs for LSPs, CSNP, and PSNP.

### URI

http://host:80/rest/config/running/interface/Ethernet/%221/3%22/isis/auth-check

### Request Body

None

### Response Body

None

## History

Release version	History
16r.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/%221/1%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/%221/1%22/link-error-disable">
  <link-error-disable-entry>1</link-error-disable-entry>
  <sampling-time-in-sec>10</sampling-time-in-sec>
  <wait-time-in-sec>10</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/%221/1%22/link-error-disable

### Request Body

```
<link-error-disable>
  <link-error-disable-entry>1</link-error-disable-entry>
  <sampling-time-in-sec>10</sampling-time-in-sec>
  <wait-time-in-sec>10</wait-time-in-sec>
</link-error-disable>
```

### Response Body

None

## History

Release version	History
16r.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

*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

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
16r.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/link-oam

Configures, modifies, or retrieves Interface Link-OAM configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam	Configures, modifies, or retrieves Interface Link-OAM configuration. Valid interface type: Ethernet.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam	Displays the interface-level Loop-Detection Interface Link-OAM configuration. Valid interface type: Ethernet.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/enable	<enable>{enumeration}</enable>	Enables Link-OAM. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/allow-loopback	<allow-loopback>{enumeration}</allow-loopback>	Enables / Disables loopback. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/dying-gasp/action	<action>{action-type}</action>	Sets action that will happen in a Dying Gasp event (Receiver going down). Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/link-fault/action	<action>{action-type}</action>	Sets action that will happen in a Link Fault event(Receiver losing signal). Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/critical-event/action	<action>{action-type}</action>	Sets action that will happen in a Critical Event (malfunction). Valid interface type: Ethernet.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam	<link-oam><enable>{enumeration}</enable></link-oam>	Enables / Disables Link-OAM. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam	<link-oam><allow-loopback>true</allow-loopback></link-oam>	Enables / Disables loopback. Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/remote-failure/dying-gasp	<dying-gasp><action>{action-type}</action></dying-gasp>	Sets action that will happen in a Dying Gasp (Receiver going down). Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/remote-failure/link-fault	<link-fault><action>{action-type}</action></link-fault>	Sets action that will happen in a Link Fault (Receiver losing signal). Valid interface type: Ethernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/remote-failure/critical-event	<critical-event><action>{action-type}</action></critical-event>	Sets action that will happen in a Critical Event (malfunction). Valid interface type: Ethernet.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/enable

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/allow-loopback
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/remote-failure
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/dying-gasp
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/remote-failure/link-fault
<base_URI>/config/running/interface/{interface-type}/{interface-name}/link-oam/remote-failure/critical-event

## Parameters

### *action*

Action that will happen on receipt of a remote failure message. Default is event logging through syslog. Allowed values: block-interface

### *enable*

Indicates whether Link OAM is enabled or disabled. Boolean value.

### *allow-loopback*

Indicates whether remote loopback is enabled or disabled. Boolean value.

## Usage Guidelines

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

## History

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

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

Configures 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**.

*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
16r.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/loop-detection

Configures, modifies, or retrieves Interface Loop Detection configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection	Configures, modifies, or retrieves Interface Loop Detection configuration details.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection	Displays the interface-level Loop-Detection information.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection/shutdown-disable	Displays
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection/vlan	Displays

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection	<loop-detection><shutdown-disable>true</shutdown-disable></loop-detection>	Disables the shutting down of the interface by Loop Detection.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection	<loop-detection><vlan>{ui32-vlan-range}</vlan></loop-detection>	Configures the VLAN ID at interface level.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection/shutdown-disable	<shutdown-disable>true</shutdown-disable>	Disables the shutting down of the interface by Loop Detection.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection/vlan	<vlan>{ui32-vlan-range}</vlan>	Configures the VLAN ID at interface level.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection/shutdown-disable
<base_URI>/config/running/interface/{interface-type}/{interface-name}/loop-detection/vlan

## Parameters

*vlan*

Identifies the VLAN. Range 1 - 4090.

## 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/%220/44%22/loop-detection

### Request Body

None

### Response Body

```
<loop-detection xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Ethernet/%220/44%22/loop-detection">
  <shutdown-disable>true</shutdown-disable>
  <vlan>40</vlan>
</loop-detection>
```

The following example uses the PUT option to disable the shutting down of the interface by Loop Detection.

### URI

http://host:80/rest/config/running/interface/Ethernet/%220/44%22/loop-detection/shutdown-disable

### Request Body

```
<shutdown-disable>true</shutdown-disable>
```

### Response Body

none

## History

Release version	History
17r.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><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/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}

## 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

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
17r.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/nd/ra-dns-server

Configures, modifies, or retrieves the Domain Name System (DNS) server address and the lifetime multiplier information to IPv6 hosts in the Router Advertisement (RA) message.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ra-dns-server	Configures the Domain Name System (DNS) server address and the lifetime multiplier information to IPv6 hosts in the Router Advertisement (RA) message. Valid interface types: Ethernet, Ve.

GET URIs	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ra-dns-server/{ipv6_address_of_name_server}	Retrieves the Domain Name System (DNS) server address to IPv6 hosts in the Router Advertisement (RA) message. Valid interface types: Ethernet, Ve.

POST URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}	<ra-dns-server><dns-server-prefix-global>{dns-server-prefix}</dns-server-prefix-global></ra-dns-server>	Sets global DNS server option and sets the Lifetime multiplier. Valid interface types: Ethernet, Ve.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ra-dns-server/{ipv6_address_of_name_server}/lifetime-multiplier	<lifetime-multiplier>decimal</lifetime-multiplier>	Lifetime multiplier for the DNS Server option. Valid interface types: Ethernet, Ve.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ra-dns-server/{ipv6_address_of_name_server}/lifetime-multiplier
<base_URI>/config/running/interface/{interface-type}/{interface-name}/ra-dns-server/{ipv6_address_of_name_server}

## 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 and the lifetime multiplier information.

### URI

http://host:80/rest/config/running/interface/Ethernet/%222/25%22/ra-dns-server/3300:36::11/lifetime-multiplier

### Request Body

None

### Response Body

```
<ra-dns-server xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest"
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 xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest"
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 xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest"
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>
```

The following is an example of the POST operation to set global DNS server option and sets the Lifetime multiplier.

### URI

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

### 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

interface/{interface-type}/{interface-name}/nd/ra-dns-server

The following is an example of the DELETE operation to remove DNS server.

### **URI**

http://host:80/rest/config/running/interface/Ethernet/%221/1%22/ra-dns-server/3400:36::11/lifetime-multiplier

### **Request Body**

None

### **Response Body**

None

## **History**

Release version	History
16r.1.00	This API call was introduced.



# interface/{interface-type}/{interface-name}/rmon/collection

Configures 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.

DELETE URIs
<base_URI>/config/running/interface/{interface-type}/{interface-name}/rmon/collection/stats/{ether-stats-index}

DELETE URIs
<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/%22/13%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/%22/13%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
16r.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 16777215. The default value is 32768.

## 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
16r.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. Valid interface types: Ethernet, Port-channel.

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.
<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. 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.

interface/{interface-type}/{interface-name}/spanning-tree

*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
16r.1.00	This API call was introduced.

# interface/{interface-type}/{interface-name}/storm-control/ingress

Configures, modifies, or retrieves the 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 rateValid 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-bps>(rate-limit-bps-type)</rate-bps></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
16r.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. Supported interface types are: Port-Channel, FortyGigabitEthernet, GigabitEthernet, HundredGigabitEthernet, and TenGigabitEthernet.

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 are: Port-Channel, FortyGigabitEthernet, GigabitEthernet, HundredGigabitEthernet, and TenGigabitEthernet.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/access	Sets the interface as access.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/mode	Sets mode of the Layer 2 interface.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security	Enables port-security feature.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/private-vlan	Sets private VLAN configuration.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/trunk	Sets the Layer 2 interface as trunk.

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.

GET URIs	Description
<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.
<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. Supported interface types: Ethernet, Port-Channel.
<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.



PATCH URIs	Payload	Description
<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.
<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

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

## 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.

### *trunk-basic*

Sets the Layer 2 interface as private-vlan trunk basic.

*trunk-promiscuous*

Sets the Layer 2 interface as private-vlan trunk promiscuous.

*trunk-host*

Sets the Layer 2 interface as private-vlan trunk host.

*accessvlan*

Specifies the VLAN ID.

*rspan-access-vlan*

Specifies the RSPAN VLAN ID to set as access VLAN.

*pvlan\_all*

Allows all VLANs to Xmit/Rx through the Layer 2 interface.

*pvlan\_none*

Allows no VLANs to Xmit/Rx through the Layer 2 interface.

*pvlan\_add*

Adds a VLAN to Xmit/Rx through the Layer 2 interface.

*pvlan\_except*

Allows all VLANs except VID to Xmit/Rx through Layer 2 interface.

*pvlan\_remove*

Removes a VLAN that Xmit/Rx through the Layer 2 interface.

*pvlanNativevlan*

Specifies the VLAN interface number.

*pvlan-native-vlan-ctag-id*

Associates a Ctag as Private VLAN.

*host-pri-pvlan*

Specifies the VLAN interface number.

*host-sec-pvlan*

Specifies the host VLAN interface number.

*trunk-pri-pvlan*

Specifies the trunk primary VLAN ID.

*trunk-sec-pvlan*

Specifies the trunk secondary VLAN ID.

*promis-pri-pvlan*

Specifies the primary VLAN ID.

*oper*

Sets the operation to be performed as **add** (Adds Secondary VLAN IDs) or **delete** (Remove secondary VLAN IDs).

*promis-sec-pvlan-range*

Specifies the secondary VLAN identification.

*all*

Specifies all Dot1q VLANs to add.

*none*

Specifies 'no dot1q vlans'.

<i>add</i>	Specifies list of VLANs to be added.
<i>except</i>	Specifies exception list of VLANs.
<i>remove</i>	Specifies the list of VLANs to be removed.
<i>add-rspan-trunk-vlan</i>	Specifies the RSPAN VLAN IDs to add.
<i>remove-rspan-trunk-vlan</i>	Specifies the list of RSPAN VLANs to be removed.
<i>trunk-vlan-id</i>	Specifies the trunk VLAN ID.
<i>trunk-ctag-id</i>	Specifies the Ctag 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/TenGigabitEthernet/%221/0/5%22

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/FortyGigabitEthernet/%22195/2/2%22/switchport">
  <switchport>true</switchport>
  <mode y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/mode">
    <private-vlan y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
mode/private-vlan">
      <trunk y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/mode/
private-vlan/trunk">
        <trunk-basic>true</trunk-basic>
        <trunk-promiscuous>true</trunk-promiscuous>
        <trunk-host>true</trunk-host>
      </trunk>
    </private-vlan>
  </mode>
  <port-security y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
port-security">
    <max>5</max>
  </port-security>
  <access y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/access">
    <accessvlan>2000</accessvlan>
    <rspan-access y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
access/rspan-access">
      <rspan-access-vlan>1000</rspan-access-vlan>
    </rspan-access>
  </access>
  <private-vlan y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
private-vlan">
    <trunk y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/private-
vlan/trunk">
      <allowed y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
private-vlan/trunk/allowed">
        <vlan y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
private-vlan/trunk/allowed/vlan">
          <pvlan_all>true</pvlan_all>
          <pvlan_none>true</pvlan_none>
          <pvlan_add>10</pvlan_add>
          <pvlan_except>2000</pvlan_except>
          <pvlan_remove>12</pvlan_remove>
        </vlan>
      </allowed>
      <native y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/
private-vlan/trunk/native">
        <pvlanNativevlan>2000</pvlanNativevlan>
        <pvlan-native-vlan-ctag-id>3000</pvlan-native-vlan-ctag-id>
      </native>
    </trunk>
    <host-association y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/
switchport/private-vlan/host-association">
      <host-pri-pvlan>1000</host-pri-pvlan>
    </host-association>
  </private-vlan>
</switchport>
```

```

    <host-sec-pvlan>2000</host-sec-pvlan>
  </host-association>
  <association y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/private-vlan/association">
    <trunk y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/private-vlan/association/trunk">
      <trunk-pri-pvlan>100</trunk-pri-pvlan>
      <trunk-sec-pvlan>300</trunk-sec-pvlan>
    </trunk>
  </association>
  <mapping y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/private-vlan/mapping">
    <promis-pri-pvlan>400</promis-pri-pvlan>
    <oper>add</oper>
    <promis-sec-pvlan-range>1-10</promis-sec-pvlan-range>
  </mapping>
</private-vlan>
<trunk y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk">
  <allowed y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed">
    <vlan y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed/vlan">
      <all>true</all>
      <none>true</all>
      <add>10</add>
      <except>2000</except>
      <remove>12</remove>
    </vlan>
    <rspan-vlan y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed/rspan-vlan">
      <add-rspan-trunk-vlan>100</add-rspan-trunk-vlan>
      <remove-rspan-trunk-vlan>200</remove-rspan-trunk-vlan>
    </rspan-vlan>
    <trunk-rspan-vlan-classification y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed/trunk-rspan-vlan-classification">
      <rspan-vlan y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed/trunk-rspan-vlan-classification/rspan-vlan">
        <add y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed/trunk-rspan-vlan-classification/rspan-vlan/add">
          <trunk-vlan-id>10</trunk-vlan-id>
          <trunk-ctag-id>20</trunk-ctag-id>
        </add>
        <remove y:self="/rest/config/running/interface/FortyGigabitEthernet/%22195/2/2%22/switchport/trunk/allowed/trunk-rspan-vlan-classification/rspan-vlan/remove">
          <trunk-vlan-id>50</trunk-vlan-id>
          <trunk-ctag-id>60</trunk-ctag-id>
        </remove>
      </rspan-vlan>
    </trunk-rspan-vlan-classification>
  </allowed>
</trunk>
</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">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>

```

interface/{interface-type}/{interface-name}/switchport

The following is an example of the POST operation to configure the switchport.

### URI

http://host:80/rest/config/running/interface/TenGigabitEthernet/%221/0/5%22

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/TenGigabitEthernet/%221/0/5%22/switchport

http://host:80/rest/config/running/interface/Port-channel/{101}/switchport

### Request Body

None

### Response Body

None

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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 and 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 and 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 and 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 and 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 and 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 and 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 and 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 and 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 and 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 and 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 and Port-channel.
<base_URI>/config/running/interface/Ethernet/{name}/switchport	<port-security />	Configures port security on an interface. Valid interface types: Ethernet and 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 and 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 and 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 and 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 and 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 and 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 and Port-channel.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/switchport/port-security/shutdown-time	<shutdown-time>{uint32}</shutdown-time>	Configures auto recovery time for port security violation. Valid interface types: Ethernet and 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}

## Parameters

*interface-type*

Valid interface types: Ethernet and Port-channel.

*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/%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 PATCH option to remove port security.

### **URI**

URI - http://host:80/rest/config/running/interface/Ethernet/%223/2%22/switchport/port-security

### **Request Body**

Request Body - <port-security><max>5</max></port-security>

### **Response Body**

None

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
16r.1.00	This API call was introduced.

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

Configures, retrieves, and modifies VRRPE group

## Resource URIs

URI	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-extended-group	Configures VRRPE 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/20/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/20/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
16r.1.00	This API call was introduced.

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

Configures, retrieves, and modifies a virtual router group (VRRP)

## 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>{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.

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>{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.

PATCH URIs	Payload	Description
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><use-v2-checksum>true</use-v2-checksum></vrrp-group>	Enables v2 checksum computation method for VRRPv3 session. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid}/track/interface/{interface-type},{interface-name}	<interface><priority>{uint8}</priority></interface>	Trackport Priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><advertisement-interval>{uint32}</advertisement-interval></vrrp-group>	Advertisement interval. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><enable>true</enable></vrrp-group>	Enable Session. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><hold-time>{uint32}</hold-time></vrrp-group>	Hold-time. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><preempt-mode>true</preempt-mode></vrrp-group>	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	<unicast-request><receive>true</receive></unicast-request>	Receive unicast ARP requests. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<interface><priority>{uint8}</priority></interface>	Configures the priority. Supported interface types: Ethernet, Ve.
<base_URI>/config/running/interface/{interface-type}/{interface-name}/vrrp-group/{vrid},{version}	<vrrp-group><description>{string}</description></vrrp-group>	Characters describing the interface. 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

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

## History

Release version	History
16r.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 port 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.
<base_URI>/config/running/interface/Port-channel/{name}/load-balance-type	Hash based load balancing

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}
<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
16r.1.00	This API call was introduced.

# interface/tunnel

Configures a tunnel.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/tunnel	Configures a tunnel.

GET URIs	Description
<base_URI>/config/running/interface/tunnel/{identifier}/mode	Retrieves tunnel encapsulation method.
<base_URI>/config/running/interface/tunnel/{identifier}/source	Retrieves source of tunnel.
<base_URI>/config/running/interface/tunnel/{identifier}/destination	Retrieves destination IP address.
<base_URI>/config/running/interface/tunnel/{identifier}/ttl	Retrieves tunnel TTL.
<base_URI>/config/running/interface/tunnel/{identifier}/dscp	Retrieves tunnel DSCP.
<base_URI>/config/running/interface/tunnel/{identifier}/name	Retrieves tunnel name.
<base_URI>/config/running/interface/tunnel/{identifier}/dscp-ttl-mode	Retrieves tunnel DSCP TTL mode.
<base_URI>/config/running/interface/tunnel/{identifier}/statistics	Retrieves tunnel statistics.
<base_URI>/config/running/interface/tunnel/{identifier}/keepalive	Retrieves tunnel keepalive.
<base_URI>/config/running/interface/tunnel/{identifier}/keepalive/retry-count	Retrieves retry count.

POST URIs	Payload	Description
<base_URI>/config/running/interface	<tunnel><identifier>{uint32}</identifier></tunnel>	Creates a tunnel.

PUT URIs	Payload	Description
<base_URI>/config/running/interface/tunnel/{identifier}/mode/gre/ip	<ip>{enumeration}</ip>	Enables generic routing encapsulation (GRE) over a tunnel interface and specifies that the tunneling protocol is IPv4.
<base_URI>/config/running/tunnel/{identifier}/source/source-address	<source-address>{inet:ipv4-address}</source-address>	Configures the source IP address.
<base_URI>/config/running/interface/tunnel/{identifier}/destination	<destination>{inet:ipv4-address}</destination>	Configures the destination IP address.
<base_URI>/config/running/interface/tunnel/{identifier}/router-interface/ve	<ve>{uint32}</ve>	Configures the router interface for a tunnel.
<base_URI>/config/running/interface/tunnel/{identifier}/ttl	<ttl>{uint32}</ttl>	Configures Tunnel TTL.
<base_URI>/config/running/interface/tunnel/{identifier}/dscp	<dscp>{uint32}</dscp>	Configures Tunnel DSCP.
<base_URI>/config/running/interface/tunnel/{identifier}/statistics	<statistics>{enumeration}</statistics>	Configures Tunnel statistics.
<base_URI>/config/running/interface/tunnel/{identifier}/keepalive	<keepalive><time-interval>{uint32}</time-interval><retry-count>{uint32}</retry-count></keepalive>	Configures Tunnel keepalive.

**DELETE URIs**

```
<base_URI>/config/running/interface/tunnel/{identifier}
```

## Parameters

*identifier*

Specifies the tunnel identifier. Valid values range from 1 through 1024.

*ve num*

Specifies a virtual router interface number. Valid values range from 1 through 4095.

*tll*

Specifies the tunnel TTL range. Valid values range from 1 through 255.

*dscp*

Specifies the tunnel DSCP range. Valid values range from 0 through 63.

*time-interval*

Specifies the tunnel keepalive time interval. Valid values range from 1 through 32767.

*retry-count*

Specifies the tunnel keepalive retry count. Valid values 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/interface/tunnel/1/mode
```

**Request Body**

None

**Response Body**

```
<mode xmlns="urn:brocade.com:mgmt:brocade-gre-vxlan" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/interface/tunnel/1/mode">
  <gre y:self="/rest/config/running/interface/tunnel/1/mode/gre">
    <ip>true</ip>
  </gre>
</mode>
```

The following is an example of the PUT operation to configure GRE over a tunnel interface and specifies that the tunneling protocol is IPv4..

### **URI**

http://host:80/rest/config/running/interface/tunnel/1/mode/gre/ip

### **Request Body**

```
<ip>true</ip>
```

### **Response Body**

None

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

### **URI**

http://host:80/rest/config/running/interface/tunnel/1

### **Request Body**

None

### **Response Body**

None

## History

Release version	History
16r.1.00	This API call was introduced.



# interface/vlan/{vlan-number}/suppress-nd

Enables Neighbor Discovery (ND) suppression on the current VLAN, lessening the amount of ND control traffic within an IP Fabric.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/vlan/{vlan-number}/suppress-nd	Enables Neighbor Discovery (ND) suppression on the current VLAN.

## Parameters

*enable*

Enables ND suppression on the current VLAN.

## 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/vlan/8000/suppress-nd

### Request Body

None

### Response Body

```
<suppress-nd xmlns="urn:brocade.com:mgmt:brocade-ipv6-nd-ra" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/interface/Vlan/8000/suppress-nd">
  <enable>true</enable>
</suppress-nd>
```

## History

Release version	History
17r.2.00	This API call was introduced.

# interface/vlan/{vlan-number}/suppress-arp

Enables Address Resolution Protocol (ARP) suppression on the current VLAN, lessening ARP-related traffic within an IP Fabric.

## Resource URIs

URI	Description
<base_URI>/config/running/interface/vlan/{vlan-number}/suppress-arp	Enables Address Resolution Protocol (ARP) suppression on the current VLAN.

## Parameters

*enable*

Enables ARP suppression on the current VLAN.

## 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/vlan/8000/suppress-arp

### Request Body

None

### Response Body

```
<suppress-arp xmlns="urn:brocade.com:mgmt:brocade-arp" y:self="/rest/config/running/interface/Vlan/8000/suppress-arp">
  <enable>true</enable>
</suppress-arp>
```

## History

Release version	History
17r.2.00	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.

GET URIs	Description
<base_URI>/config/running/ip/access-list	Retrieves IP access list.
<base_URI>/config/running/ip/access-list/standard	Retrieves standard IP access list.
<base_URI>/config/running/ip/access-list/standard/{acl-name}	Retrieves a standard IP ACL.
<base_URI>/config/running/ip/access-list/extended	Retrieves extended IP access list.
<base_URI>/config/running/ip/access-list/extended/{acl-name}	Retrieves an extended IP ACL.

POST URIs	Payload	Description
<base_URI>/config/running/ip/access-list	<standard><name>{acl-name}</name></standard>	Configures a standard ACL.
<base_URI>/config/running/ip/access-list	<extended><name>{acl-name}</name></extended>	Configures an extended ACL.

DELETE URIs
<base_URI>/config/running/running/ip/access-list
<base_URI>/config/running/running/ip/access-list/standard
<base_URI>/config/running/running/ip/access-list/standard/{name}
<base_URI>/config/running/running/ip/access-list/standard/{acl-name}/seq/{seq-id}
<base_URI>/config/running/running/ip/access-list/extended
<base_URI>/config/running/running/ip/access-list/extended/{name}
<base_URI>/config/running/running/ip/access-list/extended/{acl-name}/seq/{seq-id}

## Parameters

*name*

Specifies the IPv4 access list name.

*seq*

Specifies the sequence number.

<i>seq-id</i>	Specifies the sequence number for the rule.
<i>action</i>	Specifies the action to be performed. Supported actions are <b>deny</b> , <b>hard-drop</b> , and <b>permit</b> . Configuring deny drops traffic. Configuring hard-drop force drops traffic. Configuring permit allows traffic.
<i>src-host-any-sip</i>	Specifies any source host IP address.
<i>src-host-ip</i>	Specifies the source host IP address.
<i>src-mask</i>	Configures the source IP address mask.
<i>count</i>	Enables the counting of the packets matching the rule.
<i>log</i>	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.
<i>protocol-type</i>	The type of protocol used.
<i>dst-host-any-dip</i>	Specifies any destination host IP address.
<i>dst-host-ip</i>	Specifies the destination host IP address.
<i>vlan</i>	Specifies the VLAN interface number.
<i>dscp</i>	Specifies the DSCP field value in IP header when a packet matches a flow.

## 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 configurations.

### URI

http://host:80/rest/config/running/ip/access-list

### Request Body

None

### Response Body

```
<access-list xmlns="urn:brocade.com:mgmt:brocade-ip-access-list" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ip/access-list">
  <standard y:self="/rest/config/running/ip/access-list/standard/managementtest">
    <name>managementtest</name>
  </standard>
  <standard y:self="/rest/config/running/ip/access-list/standard/stdacl1">
    <name>stdacl1</name>
  </standard>
  <extended y:self="/rest/config/running/ip/access-list/extended/Sachin">
    <name>Sachin</name>
  </extended>
  <extended y:self="/rest/config/running/ip/access-list/extended/extacl1">
    <name>extacl1</name>
  </extended>
  <extended y:self="/rest/config/running/ip/access-list/extended/shipra">
    <name>shipra</name>
  </extended>
  <extended y:self="/rest/config/running/ip/access-list/extended/test1">
    <name>test1</name>
  </extended>
</access-list>
```

The following example uses the POST option to configure a standard access list.

### URI

http://host:80/rest/config/running/ip/access-list

### Request Body

```
<standard >
  <name>std10</name>
</standard>
```

### Response Body

None

The following example uses the DELETE option to remove a standard access list.

### *URI*

http://host:80/rest/config/running/ip/access-list/standard/std10

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.1.00	This API call was introduced.

# ip/as-path

Configures, retrieves, and modifies 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
16r.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
16r.1.00	This API call was introduced.

# ip/extcommunity-list

Configures, retrieves, and modifies standard 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
16r.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
16r.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/PRLIST1,seq,5/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/PRLIST1,seq,5

### Request Body

None

### Response Body

None

## History

Release version	History
16r.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 Extreme 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 Extreme 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 Extreme 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:Extreme.com:mgmt:Extreme-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
16r.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	Description
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/src-host-ip	Retrieves the source host IP of a specific standard ACL with a sequence ID.
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/src-mask	Displays whether count is enabled for a standard ACL.
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/count	Displays whether count is enabled for a specific standard ACL.
<base_URI>/config/running/ipv6/access-list/standard/{name}/seq/{seq-id}/log	Displays whether log is configured for a specific standard ACL.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/copy-sflow	Sends matching inbound packets to the sFlow collector.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-lt-tcp	s-port numbers less than or equal to Transmission Control Protocol (TCP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-gt-tcp	s-port numbers greater than or equal to Transmission Control Protocol (TCP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-eq-neq-udp	All TCP or User Datagram Protocol (UDP) port numbers except the s-port number.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-lt-udp	s-port numbers less than or equal to User Datagram Protocol (UDP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/sport-number-gt-udp	s-port numbers greater than or equal to User Datagram Protocol (UDP).
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/vlan	Displays the VLAN interface to which the ACL is bound.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/count	Displays whether count is enabled for an extended ACL.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/log	Displays whether log is configured for an extended ACL.
<base_URI>/config/running/ipv6/access-list/extended/{name}/seq/{seq-id}/mirror	Mirrors packets matching the rule.

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/access-list	<standard><name>[name]</name></standard>	Configures a standard IPv6 access list.

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/access-list/standard/{name}	<seq><seq-id>{seq-id}</seq-id><action>{enumeration}</action><src-host-any-sip>{sip-cid}</src-host-any-sip></seq>	Configures the parameters of a standard IPv6 access list.
<base_URI>/config/running/ipv6/access-list	<extended><name>{name}</name></extended>	Configures an extended IPv6 access list.

DELETE URIs
<base_URI>/config/running/ipv6/access-list/standard/{name}
<base_URI>/config/running/ipv6/access-list/extended/{name}
<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 logging mechanism. 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*

Specifies the destination host IP address.

*vlan*

VLAN interface 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.

### URI

http://host:80/rest/config/running/ipv6/access-list

### Request Body

None

### 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">
  <standard y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1">
    <name>ipv6acl1</name>
    <seq y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1/seq/10">
      <seq-id>10</seq-id>
      <action>hard-drop</action>
      <src-host-any-sip>host</src-host-any-sip>
      <src-host-ip>10:20:45:30:15:75:100:110</src-host-ip>
      <count>true</count>
      <log>true</log>
    </seq>
    <seq y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1/seq/20">
      <seq-id>20</seq-id>
      <action>permit</action>
      <src-host-any-sip>any</src-host-any-sip>
      <count>true</count>
      <log>true</log>
    </seq>
    <seq y:self="/rest/config/running/ipv6/access-list/standard/ipv6acl1/seq/50000">
      <seq-id>50000</seq-id>
      <action>hard-drop</action>
      <src-host-any-sip>any</src-host-any-sip>
      <count>true</count>
      <log>true</log>
    </seq>
  </standard>
  <extended y:self="/rest/config/running/ipv6/access-list/extended/acl16">
    <name>acl16</name>
    <seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/10">
      <seq-id>10</seq-id>
      <action>deny</action>
      <protocol-type>ipv6</protocol-type>
      <src-host-any-sip>host</src-host-any-sip>
      <src-host-ip>10:20:14:45:56:58:45:78</src-host-ip>
      <dst-host-any-dip>any</dst-host-any-dip>
      <vlan>100</vlan>
      <count>true</count>
      <log>true</log>
    </seq>
    <seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/20">
      <seq-id>20</seq-id>
      <action>hard-drop</action>
      <protocol-type>ipv6</protocol-type>
      <src-host-any-sip>any</src-host-any-sip>
      <dst-host-any-dip>host</dst-host-any-dip>
      <dst-host-ip>10:45:78:54:45:78:52:87</dst-host-ip>
      <vlan>1100</vlan>
      <count>true</count>
      <log>true</log>
    </seq>
  </extended>
</access-list>
```

```

<seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/30">
  <seq-id>30</seq-id>
  <action>permit</action>
  <protocol-type>tcp</protocol-type>
  <src-host-any-sip>any</src-host-any-sip>
  <dst-host-any-dip>host</dst-host-any-dip>
  <dst-host-ip>10:78:85:74:78:45:78:45</dst-host-ip>
  <vlan>1200</vlan>
  <count>>true</count>
  <log>>true</log>
</seq>
<seq y:self="/rest/config/running/ipv6/access-list/extended/acl16/seq/4500">
  <seq-id>4500</seq-id>
  <action>hard-drop</action>
  <protocol-type>ipv6</protocol-type>
  <src-host-any-sip>any</src-host-any-sip>
  <dst-host-any-dip>any</dst-host-any-dip>
  <vlan>4500</vlan>
  <count>>true</count>
  <log>>true</log>
</seq>
</extended>
<extended y:self="/rest/config/running/ipv6/access-list/extended/ip_acl_1">
  <name>ip_acl_1</name>
  <seq y:self="/rest/config/running/ipv6/access-list/extended/ip_acl_1/seq/10">
    <seq-id>10</seq-id>
    <action>deny</action>
    <protocol-type>ipv6</protocol-type>
    <src-host-any-sip>2001:2002:1234:1::/64</src-host-any-sip>
    <dst-host-any-dip>2001:1001:1234:1::/64</dst-host-any-dip>
    <count>>true</count>
  </seq>
  <seq y:self="/rest/config/running/ipv6/access-list/extended/ip_acl_1/seq/20">
    <seq-id>20</seq-id>
    <action>deny</action>
    <protocol-type>ipv6</protocol-type>
    <src-host-any-sip>2002:2003:1234:1::/64</src-host-any-sip>
    <dst-host-any-dip>2001:3001:1234:1::/64</dst-host-any-dip>
    <count>>true</count>
  </seq>
</extended>
</access-list>

```

The following is an example of the POST operation to create an extended access list.

## URI

http://host:80/rest/config/running/ipv6/access-list

## Request Body

```

<extended>
  <name>test</name>
</extended>

```

## Response Body

None

The following is an example of the DELETE operation to remove a standard access list.

### **URI**

http://host:80/rest/config/running/ipv6/access-list/standard/ipv6acl1

### **Request Body**

None

### **Response Body**

None

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

### **URI**

http://host:80/rest/config/running/ipv6/access-list/standard/ACL-std/seq/40/src-host-ip

### **Request Body**

None

### **Response Body**

```
<src-host-ip xmlns="urn:brocade.com:mgmt:brocade-ipv6-access-list" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/ipv6/access-list/standard/ACL-std/seq/40/src-host-ip">2807::1</src-host-ip>
```

The following example uses the POST option to configure a standard access list (rest1).

### **URI**

http://host:80/rest/config/running/ipv6/access-list

### **Request Body**

```
<standard><name>rest1</name></standard>
```

### **Response Body**

None

The following example uses the DELETE option to remove a standard access list (rest1).

**URI**

http://host:80/rest/config/running/ipv6/access-list/standard/rest1

**Request Body**

None

**Response Body**

None

**History**

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

# ipv6/nd

Configures, modifies, or retrieves Neighbor Discovery 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 globally 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
16r.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
16r.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	Displays NSSAs advertised stub route metric.
<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}/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	Sets 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	Display 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}/graceful-restart	Displays graceful restart status.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/graceful-restart/helper	Displays the OSPFv3 graceful restart (GR) helper capability status.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/graceful-restart/helper/disable	Disables the OSPFv3 GR helper capability.

GET URIs	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/graceful-restart/helper/strict-lsa-checking	Enables the OSPFv3 GR helper mode with strict link-state advertisement (LSA) checking.
<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.
<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/isis	Displays ISIS routes.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/route-map	Displays Route map reference.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/metric	Displays ISIS metric.
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/metric-type	Displays ISIS 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.



GET URIs	Description
<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.
<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 LSA's
<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/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.

GET URIs	Description
<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.
<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

POST URIs	Payload	Description
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	<static />	Static routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute	<isis />	ISIS 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}</summary-address-value></summary-address>	Configure IP address summaries
<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

POST URIs	Payload	Description
<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-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
<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

PUT URIs	Payload	Description
<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.
<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

PUT URIs	Payload	Description
<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
<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}/graceful-restart/helper/disable	<disable>[enumeration]</disable>	Disable graceful restart helper capability
<base_URI>/config/running/ipv6/router/ospf/{vrf}/graceful-restart/helper/strict-lsa-checking	<strict-lsa-checking>[enumeration]</strict-lsa-checking>	Set strict LSA checking
<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

PUT URIs	Payload	Description
<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/isis/route-map	<route-map>{common-def:name-string63}</route-map>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/level-1	<level-1>{enumeration}</level-1>	Redistribution of IS-IS Level-1 routes only
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/level-2	<level-2>{enumeration}</level-2>	Redistribution of IS-IS Level-2 routes only
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/level-1-2	<level-1-2>{enumeration}</level-1-2>	Redistribution of IS-IS Level-1 and Level-2 routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/metric	<metric>{uint32}</metric>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/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
<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 LSA's
<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



PUT URIs	Payload	Description
<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

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
<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

PATCH URIs	Payload	Description
<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.
<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

PATCH URIs	Payload	Description
<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
<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}/graceful-restart/helper	<helper><disable>{enumeration}</disable></helper>	Disable graceful restart helper capability
<base_URI>/config/running/ipv6/router/ospf/{vrf}/graceful-restart/helper	<helper><strict-lsa-checking>{enumeration}</strict-lsa-checking></helper>	Set strict LSA checking
<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

PATCH URIs	Payload	Description
<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/isis	<isis><route-map>{common-def:name-string63}</route-map></isis>	Route map reference
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/level-1	<level-1>{enumeration}</level-1>	Redistribution of IS-IS Level-1 routes only
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/level-2	<level-2>{enumeration}</level-2>	Redistribution of IS-IS Level-2 routes only
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis/level-1-2	<level-1-2>{enumeration}</level-1-2>	Redistribution of IS-IS Level-1 and Level-2 routes
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis	<isis><metric>{uint32}</metric></isis>	OSPF metric
<base_URI>/config/running/ipv6/router/ospf/{vrf}/redistribute/isis	<isis><metric-type>{ospf:metric-type}</metric-type></isis>	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
<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

PATCH URIs	Payload	Description
<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

## 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/default-vrf

### 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>
  <area y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/0">
    <area-id>0</area-id>
    <normal>true</normal>
    <stub y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/0/stub">
    </stub>
    <authentication y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/0/authentication">
    </authentication>
  </area>
  <area y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/100">
    <area-id>100</area-id>
    <normal>true</normal>
    <stub y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/100/stub">
    </stub>
    <authentication y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/100/authentication">
    </authentication>
  </area>
  <area y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/200">
    <area-id>200</area-id>
    <nssa y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/200/nssa">
    </nssa>
    <stub y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/200/stub">
    </stub>
    <authentication y:self="/rest/config/running/ipv6/router/ospf/default-vrf/area/200/authentication">
    </authentication>
  </area>
  <auto-cost y:self="/rest/config/running/ipv6/router/ospf/default-vrf/auto-cost">
  </auto-cost>
  <default-information-originate y:self="/rest/config/running/ipv6/router/ospf/default-vrf/default-
information-originate">
  </default-information-originate>
  <distribute-list y:self="/rest/config/running/ipv6/router/ospf/default-vrf/distribute-list">
    <route-map y:self="/rest/config/running/ipv6/router/ospf/default-vrf/distribute-list/route-map">
    </route-map>
    <prefix-list y:self="/rest/config/running/ipv6/router/ospf/default-vrf/distribute-list/prefix-list">
    </prefix-list>
  </distribute-list>
  <external-lsdb-limit>50000</external-lsdb-limit>
  <graceful-restart y:self="/rest/config/running/ipv6/router/ospf/default-vrf/graceful-restart">
    <helper y:self="/rest/config/running/ipv6/router/ospf/default-vrf/graceful-restart/helper">
    </helper>
  </graceful-restart>
  <log y:self="/rest/config/running/ipv6/router/ospf/default-vrf/log">
  </log>
  <redistribute y:self="/rest/config/running/ipv6/router/ospf/default-vrf/redistribute">
  </redistribute>
  <timers y:self="/rest/config/running/ipv6/router/ospf/default-vrf/timers">
    <spf y:self="/rest/config/running/ipv6/router/ospf/default-vrf/timers/spf">
    </spf>
  </timers>
</ospf>
```

```

</timers>
<nonstop-routing>true</nonstop-routing>
<max-metric y:self="/rest/config/running/ipv6/router/ospf/default-vrf/max-metric">
</max-metric>
</ospf>

```

The following example uses the POST option to configure OSPF instance for the VRF.

### **URI**

http://host:80/rest/config/running/config/running/ipv6/router

### **Request Body**

```
<ospf><vrf>vrf1</vrf></ospf>
```

### **Response Body**

None

## History

Release version	History
16r.1.00	This API call was introduced.

# ldap-server

Configures, modifies, or retrieves 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
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

# ldap-server/host

Configures, modifies, or retrieves LDAP server for AAA settings.

## Resource URIs

URI	Description
<base_URI>/config/running/ldap-server/host	LDAP Server for AAA.

## 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 y:self="/rest/config/running/ldap-server/host/inetaddress">
  <hostname>inetaddress</hostname>
  <port>400</port>
  <retries>6</retries>
  <timeout>10</timeout>
  <basedn>test</basedn>
  <use-vrf>mgmt-vrf</use-vrf>
</host>
<host y:self="/rest/config/running/ldap-server/host/test">
  <hostname>test</hostname>
</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>test_ACL</hostname>
</host>
```

### 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/test\_API

### **Request Body**

None

### **Response Body**

None

## History

Release version	History
5.0.0	This API call was introduced.
7.0.0	This API call was modified to include the parameter <i>use-vrf</i> .

Release version	History
16r.1.00	This API call was introduced.

# ldap-server/maprole

Configures, modifies, or retrieves 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
5.0.0	This API call was introduced.

Release version	History
16r.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
16r.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	Displays whether mirror is enabled. Supported for rules in ACLs applied on physical interfaces to inbound traffic.
<base_URI>/config/running/mac/access-list/extended/{name}/seq/{seq-id}/copy-sflow	Displays copy sflow status. Supported for incoming traffic.

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
5.0.0	This API call was introduced.

Release version	History
16r.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

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/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
16r.1.00	This API call was introduced.

# ntp

Configures, modifies, or retrieves 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>{string}</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.
<base_URI>/config/running/ntp/disable	<all>   <server>	Disables the NTP server/client mode. Disabling the NTP server/client mode does not remove the configuration.
<base_URI>/config/running/ntp/authentication-key	<key-id-1 > <key-id-2> <key-id-n>	This command enables or disables the NTP authentication at global level. If the authentication is enabled, the NTP packets from servers, peers, clients not having MAC is dropped. Only those servers/peers configured with key authentication is considered for time synchronization. Client requests only with authentication is served, whose key-IDs match with one of the trusted key-IDs.
<base_URI>/config/running/ntp/master	< key key-id > < use-vrf vrf-name >	Configures the device as an authoritative NTP Server. ntp master enables device to use its own clock to synchronize with peers/clients. This command is not effective, if the NTP is enabled in client-only mode.
<base_URI>/config/running/ntp/server	<ipv4   ipv6 > <vrf name >	Specifies or adds an NTP server IP address and optionally associates an authentication key to the server.
<base_URI>/config/running/ntp/trusted-key	<key-id-1 > <key-id-2> <key-id-n>	Configures additional subset of trusted key-IDs which can be used for NTP and client authentication. The keys

POST URIs	Payload	Description
		configured for server/peer is implicitly considered as part of trusted keys.
<base_URI>/config/running/ntp/peer/	<ipv4   ipv6 > <vrf name >	Configures the NTP peers and specify the peers to synchronize the system clock. Maximum 8 NTP peers can be configured

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*

Specifies the key.

### *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

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

### URI

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

### Request Body

None

### Response Body

## History

Release version	History
16r.1.00	This API call was introduced.
17r.2.00	This API was modified to include the following: <ul style="list-style-type: none"> <li>• ntp authenticate</li> <li>• ntp disable</li> <li>• ntp master</li> <li>• ntp peer</li> <li>• ntp trusted keys</li> </ul>

# overlay

Configures VxLAN visibility.

## Resource URIs

URI	Description
<base_URI>/config/running/overlay	Configures VxLAN visibility.

GET URIs	Description
<base_URI>/config/running/overlay	Retrieves VxLAN visibility configuration information.
<base_URI>/config/running/overlay/access-list/type/vxlan/	Retrieves the VXLAN tunnel endpoint (VTEP) IP address and VXLAN Network Identifier (VNI) that match.
<base_URI>/config/running/overlay-transit/	Retrieves an overlay transit.

POST URIs	Payload	Description
<base_URI>/config/running/	<overlay-transit><user-transit-name>{string}</user-transit-name></overlay-transit>	Configures overlay transit.
<base_URI>/config/running/{user-transit-name}	<overlay><access-group>{string}</access-group><in>{enumeration}</in></overlay>	Configures overlay and binding.
<base_URI>/config/running/overlay/access-list/type/vxlan	<extended><ext-user-acl-name>{string}</ext-user-acl-name></extended>	Creates extended ACL.
<base_URI>/config/running/overlay/access-list/type/vxlan	<standard><user-acl-name>{string}</user-acl-name></standard>	Creates standard ACL.
<base_URI>/config/running/overlay/access-list/type/vxlan/standard/{acl-name}/	<seq><seq-num>{uint32}</seq-num><permit-deny>{enumeration}</permit-deny><dst-vtep-ip-host>{ip-address}</dst-vtep-ip-host><src-vtep-ip-host>{ip-address}</src-vtep-ip-host><vni>{uint32}</vni><vni-mask>{uint32}</vni-mask></seq>	Creates standard ACL rules.
<base_URI>/config/running/overlay/access-list/type/vxlan/extended/{ext-user-acl-name}	<seq><ext-seq-num>{uint32}</ext-seq-num><ext-permit-deny>{enumeration}</ext-permit-deny><dst-vtep-ip-host>{ip-address}</dst-vtep-ip-host><src-vtep-ip-host>{ip-address}</src-vtep-ip-host><vni>{uint32}</vni><vni-mask>{string}</vni-mask><count>{enumeration}</count></seq>	Creates extended ACL rules.

DELETE URIs
<base_URI>/config/running/overlay/access-list/type/vxlan/extended/{acl-name}/seq/{seq-id}
<base_URI>/config/running/{user-transit-name}

## Parameters

*acl-name*

Specifies the ACL name.

*seq-num*

Specifies the sequence ID.

<i>dst-vtep-ip-host</i>	Specifies the destination host IP address.
<i>src-vtep-ip-host</i>	Specifies the source host IP address.
<i>vni</i>	Specifies VNI.
<i>vni-mask</i>	Specifies the VNI mask.

## 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/overlay

### Request Body

None

### Response Body

```
<overlay xmlns="urn:brocade.com:mgmt:brocade-vxlan-visibility" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/overlay">
  <access-list y:self="/rest/config/running/overlay/access-list">
    <type y:self="/rest/config/running/overlay/access-list/type">
      <vxlan y:self="/rest/config/running/overlay/access-list/type/vxlan">
        <standard y:self="/rest/config/running/overlay/access-list/type/vxlan/standard/abc">
          <user-acl-name>abc</user-acl-name>
          <seq y:self="/rest/config/running/overlay/access-list/type/vxlan/standard/abc/seq/30">
            <seq-num>30</seq-num>
            <permit-deny>permit</permit-deny>
            <dst-vtep-ip-host>10.5.5.10</dst-vtep-ip-host>
            <src-vtep-ip-host>20.5.5.20</src-vtep-ip-host>
            <vni>200</vni>
            <vni-mask>ffff</vni-mask>
          </seq>
        </standard>
      </vxlan>
    </type>
  </access-list>
</overlay>
```



The following example uses the POST option to create extended ACL.

### *URI*

http://host:80/rest/config/running/overlay/access-list/type/vxlan

### *Request Body*

```
<extended>
  <ext-user-acl-name>acl-1</ext-user-acl-name>
</extended>
```

### *Response Body*

None

The following example uses the DELETE option to remove extended ACL.

### *URI*

http://host:80/rest/config/running/overlay/access-list/type/vxlan/extended/acl-1/seq/1

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.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
5.0.0	This API call was introduced.
6.0.1	This API call was modified to include the parameter <i>max-lockout-duration</i> .

Release version	History
16r.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 alphabetic characters that must occur in the password. The value can range from 0 through 32. The default minimum value is 8 lower-case alphabetic characters.

### *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
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

# protocol/cfm

CFM protocol configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/cfm	Configures CFM protocol.

GET URIs	Description
<base_URI>/config/running/protocol/cfm	Retrieves CFM protocol configuration.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}	Retrieves maintenance domain details.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	Retrieves maintenance association.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/ccm-interval	Retrieves CCM interval details.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mip-policy	Retrieves MIP policy details.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}	Retrieves maintenance endpoint details.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}/tlv-type	Retrieves TLV details.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}/remote-mep/{remote-map}	Retrieves remote maintenance endpoint details.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/maid-format	Retrieves format for the maintenance association name. Allowed values: long, short.

POST URIs	Payload	Description
<base_URI>/config/running/protocol	<cfm />	Configures CFM protocol.
<base_URI>/config/running/protocol/cfm	<domain-name><domain-name>{string}</domain-name><level>{unit32}</level></domain-name>	Configures maintenance domain.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}	<ma-name><ma-name>{string}</ma-name><id>{unit32}</id><vlan>{unit32}</vlan><priority>{unit32}</priority></ma-name>	Configures maintenance association VLAN identifier.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}	<ma-name><ma-name>{string}</ma-name><id>{uint32}</id><bridge-domain>{uint32}</bridge-domain><priority>{uint32}</priority></ma-name>	Configures a unique L2VPN domain of the maintenance association.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	<mep><mep-id>{unit32}</mep-id><mep-down-up>{string}</mep-down-up><vlan>{unit32}</vlan><inner-vlan>{uint32}</inner-vlan><mep-intf-type>{interface-type}</mep-intf-type><mep-intf-name>{interface-name}</mep-intf-name></mep>	Configures Maintenance End Point (MEP).

POST URIs	Payload	Description
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}	<remote-mep><remote-mep>{unit32}</remote-mep></remote-mep>	Configures the remote Maintenance End Point (MEP).

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}	<domain-name><level>{unit32}</level></domain-name>	Configures maintenance domain.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	<ma-name><id>{unit32}</id><vlan>{unit32}</vlan><priority>{unit32}</priority></ma-name>	Configures maintenance association VLAN.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	<ma-name><id>{uint32}</id><bridge-domain>{uint32}</bridge-domain><priority>{uint32}</priority></ma-name>	Configures maintenance association L2VPN domain.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	<ma-name><ccm-interval>{enumeration}</ccm-interval></ma-name>	Configures maintenance association CCM interval.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	<ma-name><mip-policy>{enumeration}</mip-policy></ma-name>	Configures Maintenance Intermediate Point (MIP).
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}	<mep><mep-down-up>{enumeration}</mep-down-up><vlan>{unit32}</vlan><inner-vlan>{uint32}</inner-vlan><mep-intf-type>{interface-type}</mep-intf-type><mep-intf-name>{interface-name}</mep-intf-name></mep>	Configures Maintenance End Point (MEP).
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}	<mep><tlv-type>{enumeration}</tlv-type></mep>	Configures Type, Length, Values (TLV) value.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}	<ma-name><maid-format>{maid-format-type}</maid-format></ma-name>	Configures format for the maintenance association ID. Allowed values: long, short.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/ccm-interval	<ccm-interval>{enumeration}</ccm-interval>	Configures the time interval between two successive Continuity Check Messages (CCMs) that are sent by MEPs in the specified Maintenance Association (MA)
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mip-policy	<mip-policy>{enumeration}</mip-policy>	Configures Maintenance Intermediate Point (MIP) policy.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}/tlv-type	<tlv-type>{enumeration}</tlv-type>	Configures Type, Length, Values (TLV) value.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/maid-format	<maid-format>{maid-format-type}</maid-format>	Configures format for the maintenance association ID. Allowed values: long, short.

DELETE URIs
<base_URI>/config/running/protocol/cfm
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}



DELETE URIs
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mip-policy
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}/remote-mep/{remote-mep-id}
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/maid-format

## Parameters

### *domain-name*

Specifies the maintenance domain name.

### *ma-name*

Specifies the maintenance association name.

### *id*

Specifies the MA ID used for short-MAID.

### *maid-format*

The format for MAID. Allowed values:

#### **short**

MAID does not include MD maintenance domain name and has only short MA name (default).

#### **long**

MAID includes MD name.

### *level*

Specifies the maintenance domain level.

### *bridge-domain*

Specifies the bridge domain.

### *priority*

Specifies the priority for MA.

### *mep-id*

Specifies maintenance endpoint ID.

### *mep-down-up*

Specifies whether endpoint is up or down.

### *remote-mep*

Specifies remote endpoint.

### *ccm-interval*

Specifies the CCM interval. The default value is 10-seconds.

### *mip-policy*

Specifies the MIP policy.

### *tlv-type*

Specifies the TLV type.

### *inner-vlan*

Specifies the inner-vlan ID for the MEP. Range: 1 to 4095.

## 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/cfm

### Request Body

None

### Response Body

```
<cfm xmlns="urn:brocade.com:mgmt:brocade-dotlag" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/protocol/cfm">
  <domain-name y:self="/rest/config/running/protocol/cfm/domain-name/test">
    <domain-name>test</domain-name>
    <level>1</level>
    <ma-name y:self="/rest/config/running/protocol/cfm/domain-name/test/ma-name/name">
      <ma-name>name</ma-name>
      <id>1</id>
      <vlan>120</vlan>
      <priority>1</priority>
      <ccm-interval>1-second</ccm-interval>
      <mep y:self="/rest/config/running/protocol/cfm/domain-name/test/ma-name/name/mep/1">
        <mep-id>1</mep-id>
        <mep-down-up>up</mep-down-up>
        <mep-intf-type>ethernet</mep-intf-type>
        <mep-intf-name>1/15</mep-intf-name>
      </mep>
    </ma-name>
  </domain-name>
</cfm>
```

The following example uses the POST option to configure CFM domain.

### URI

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

### Request Body

```
<domain-name>
  <domain-name>test</domain-name>
  <level>5</level>
</domain-name>
```

### Response Body

None

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

### *URI*

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

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include Long maid-format URIs and inner-vlan payloads.

# protocol/cfm/y1731

Configures, modifies, or retrieves test-profile and action-profile to facilitate Y.1731 performance monitoring of point-to-point links.

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/cfm/y1731	Configures, modifies, or retrieves test-profile and action-profile.

GET URIs	Description
<base_URI>/config/running/protocol/cfm/y1731	Displays Y.1731 configuration.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	Displays configurable-test-profile information.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/type	Displays whether measurements are ETH-SLM or ETH-DM.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/tx-interval	Displays transmission interval between 2 successive frames, in seconds.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/measurement-interval	Displays time period (in minutes) of the measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/cos	Displays Class of Service priority value for the frames.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/tx-frame-count	Displays the number of packets to be sent for measurements.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/timeout	Displays the time interval within which the reply messages are expected.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start	Displays whether measurement session starts at a fixed time, or after a specified time.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start/start-time	Displays start time of measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start/start-periodic	Displays start time for daily measurement setting.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/stop	Displays whether measurement session stops at a fixed time, or after a specified time.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/stop/stop-time	Displays stop time of measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold	Displays configured threshold settings.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward	Displays forward direction threshold.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/average	Displays average threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/maximum	Displays configured maximum threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward	Displays backward direction threshold.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/average	Displays average threshold value in the backward direction.

GET URIs	Description
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/maximum	Displays configured maximum threshold value in the backward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold	Displays threshold value.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/average	Displays average threshold.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/maximum	Displays configured maximum threshold value.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}	Displays action profile configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event	Displays actions for a specified event.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-up	Displays CCM-up event configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-up/actions	Displays actions on CCM-up event.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-down	Displays CCM-down event configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-down/actions	Displays actions on CCM-down event.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/avg-threshold	Displays average threshold event configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/avg-threshold/actions	Displays actions on average threshold event.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/max-threshold	Displays maximum threshold event configuration.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/max-threshold/actions	Displays actions on maximum threshold event.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/cfm/y1731	<y1731 />	Configures Y.1731.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/type	<type>{y1731-profile-type}</type>	Configures measurement type.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/tx-interval	<tx-interval>{y1731-profile-tx-interval}</tx-interval>	Configures transmission interval between 2 successive frames, in seconds.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/measurement-interval	<measurement-interval>{uint32}</measurement-interval>	Sets time period (in minutes) of the measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/cos	<cos>{uint8}</cos>	Configures Class of Service priority value for the frames.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/tx-frame-count	<tx-frame-count>{uint32}</tx-frame-count>	Sets the number of packets to be sent for measurements.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/timeout	<timeout>{uint8}</timeout>	Configures the time interval within which the reply messages are expected.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start	<start><start-type>{schedule-type}</start-type><start-time>{time-in-hhmmss}</start-time></start>	Configures start time of measurement session.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start/start-periodic	<start-periodic>{y1731-start-periodic}</start-periodic>	Configures daily measurement setting.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/stop	<stop><stop-type>{schedule-type}</stop-type><stop-time>{time-in-hhmmss}</stop-time></stop>	Configures stop time of measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/average	<average>{uint32}</average>	Configures average threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/maximum	<maximum>{uint32}</maximum>	Configures maximum threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/average	<average>{uint32}</average>	Configures average threshold value in the backward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/maximum	<maximum>{uint32}</maximum>	Configures maximum threshold value in the backward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/average	<average>{uint32}</average>	Configures average threshold value.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/maximum	<maximum>{uint32}</maximum>	Configures maximum threshold value.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-up/actions	<actions>{action-profile-bitmap}</actions>	Configures CCM-up event action.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-down/actions	<actions>{action-profile-bitmap}</actions>	Configures CCM-down event action.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/avg-threshold/actions	<actions>{action-profile-bitmap}</actions>	Configures average threshold event actions.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/max-threshold/actions	<actions>{action-profile-bitmap}</actions>	Configures maximum threshold event actions.

POST URIs	Payload	Description
<base_URI>/config/running/protocol/cfm	<y1731 />	Creates Y.1731 instance.
<base_URI>/config/running/protocol/cfm/y1731	<test-profile><test-profile>{string}</test-profile></test-profile>	Configures test profile.
<base_URI>/config/running/protocol/cfm/y1731	<action-profile><action-profile-name>{string}</action-profile-name></action-profile>	Configures action profile.
<base_URI>/config/running/protocol/cfm/domain-name/{domain-name}/ma-name/{ma-name}/mep/{mep-id}/remote-mep/{remote-mep}	<test-profile><rmep-test-profile>{string}</rmep-test-profile><mode>{y1731-profile-mode}</mode></test-profile>	Configures mep-test profile.

PATCH URIs	Payload	Description
base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	<test-profile><type>{y1731-profile-type}</type></test-profile>	Configures test profile.
base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	<test-profile><tx-interval>{y1731-profile-tx-interval}</tx-interval></test-profile>	Configures transmission interval between 2 successive frames, in seconds.
base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	<test-profile><measurement-interval>{uint32}</measurement-interval></test-profile>	Sets time period (in minutes) of the measurement session.
base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	<test-profile><cos>{uint8}</cos></test-profile>	Configures Class of Service priority value for the frames.
base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	<test-profile><tx-frame-count>{uint32}</tx-frame-count></test-profile>	Sets the number of packets to be sent for measurements.
base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}	<test-profile><timeout>{uint8}</timeout></test-profile>	Configures the time interval within which the reply messages are expected.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start	<start><start-type>{schedule-type}</start-type><start-time>{time-in-hhmmss}</start-time></start>	Configures start time of measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start	<start><start-periodic>{y1731-start-periodic}</start-periodic></start>	Configures daily measurement setting.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/stop	<stop><stop-type>{schedule-type}</stop-type><stop-time>{time-in-hhmmss}</stop-time></stop>	Configures stop time of measurement session.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward	<forward><average>{uint32}</average></forward>	Configures average threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward	<forward><maximum>{uint32}</maximum></forward>	Configures maximum threshold value in the forward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward	<backward><average>{uint32}</average></backward>	Configures average threshold value in the backward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward	<backward><maximum>{uint32}</maximum></backward>	Configures maximum threshold value in the backward direction.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold	<threshold><average>{uint32}</average></threshold>	Configures average threshold value.
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold	<threshold><maximum>{uint32}</maximum></threshold>	Configures maximum threshold value.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-up	<ccm-up><actions>{action-profile-bitmap}</actions></ccm-up>	Configures CCM-up event action.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/ccm-down	<ccm-down><actions>{action-profile-bitmap}</actions></ccm-down>	Configures CCM-down event action.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/avg-threshold	<avg-threshold><actions>{action-profile-bitmap}</actions></avg-threshold>	Configures average threshold event actions.
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}/event/max-threshold	<max-threshold><actions>{action-profile-bitmap}</actions></max-threshold>	Configures maximum threshold event actions.

DELETE URIs
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/measurement-interval
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/cos
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/tx-frame-count
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/timeout
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/start
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/stop
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/average
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/forward/maximum
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/average
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/backward/maximum
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/average
<base_URI>/config/running/protocol/cfm/y1731/test-profile/{test-profile}/threshold/maximum
<base_URI>/config/running/protocol/cfm/y1731/action-profile/{action-profile-name}

## Parameters

### *test-profile*

Name of test profile which contains configured parameters. Name is case sensitive and is 32 characters long.

### *type*

Specifies if the type of measurement to be done is ETH-SLM or ETH-DM.

### *tx-interval*

Transmission interval between two successive frames. Allowed values: to 1sec, 10sec, 60sec or 600sec. The default is 1sec.

### *measurement-interval*

The interval in minutes in which the measurement is performed. Range 1 - 1440 mins. The default is 15 minutes.

### *cos*

The Class of Service priority value. Range 0 - 8 for the frames. The default is 7. The value 8 signifies random CoS value to be used for measurement between 0 and 7.

### *tx-frame-count*

The number of packets to be sent in a burst once for on-demand measurement, and for every Tx-interval for scheduled (or periodic) two-way ETH-SLM measurements. For an on-demand Two-way ETH-DM, it specifies the total number of packets sent sequentially after every reply message received. The default is 10. The default is 1 second.

### *timeout*

The time interval within which the reply messages are expected for entire burst of frames sent for on-demand ETH-SLM, and for every frame sent for on-demand ETH-DM.

### *start-type*

Specifies whether to start the session either at a fixed specified time or after a specified time



*start-time*

Specifies whether to start the session either at a fixed specified time or after a specified time

*start-periodic**stop-type*

specifies stop the session either at a fixed specified time or after a specified time in hh:mm:ss format.

*average*

The average-threshold value in the applied profile; when this is exceeded, actions as configured in the action profile occur.

*maximum**actions*

The profile name used for creating an action profile. The action profile bitmap attribute is case sensitive.

## Usage Guidelines

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

## History

Release version	History
17r.1.01	This API call was introduced.

# protocol/link-oam

Configures, modifies, or retrieves Protocol Link-OAM configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/link-oam	Configures, modifies, or retrieves Protocol Link-OAM configuration.

GET URIs	Description
<base_URI>/config/running/protocol/link-oam	Displays the Protocol Loop-Detection Interface Link-OAM configuration.
<base_URI>/config/running/protocol/link-oam/shutdown	Displays whether protocol link-oam is enabled or disabled.
<base_URI>/config/running/protocol/link-oam/pdu-rate	Displays pdu-rate value.
<base_URI>/config/running/protocol/link-oam/time-out	Displays timeout value.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/link-oam	<link-oam />	Configures Protocol Link-OAM.
<base_URI>/config/running/protocol/link-oam/shutdown	<shutdown>{enumerate}</shutdown>	Disables or enables protocol link-oam
<base_URI>/config/running/protocol/link-oam/pdu-rate	<pdu-rate>{uint32}</pdu-rate>	Configures pdu-rate value.
<base_URI>/config/running/protocol/link-oam/time-out	<time-out>{uint32}</time-out>	Configures timeout value.

POST URIs	Payload	Description
<base_URI>/config/running/protocol	<link-oam />	Configures Protocol Link-OAM.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/link-oam	<link-oam><shutdown>{enumerate}</shutdown></link-oam>	Disables or enables protocol link-oam
<base_URI>/config/running/protocol/link-oam	<link-oam><pdu-rate>{uint32}</pdu-rate></link-oam>	Configures pdu-rate value.
<base_URI>/config/running/protocol/link-oam	<link-oam><time-out>{uint32}</time-out></link-oam>	Configures timeout value.

DELETE URIs
<base_URI>/config/running/protocol/link-oam
<base_URI>/config/running/protocol/link-oam/pdu-rate
<base_URI>/config/running/protocol/link-oam/time-out

## Parameters

*shutdown*

Disables or enables protocol link-oam. Boolean value.

*pdu-rate*

Number of OAM PDUs per second. Range 1-10 per second. Default is 1 per second.

*time-ou*

Hold time before Discovery process is restarted. Range 1-10 seconds. Default is 5 seconds.

## Usage Guidelines

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

## History

Release version	History
17r.1.01	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:Extreme.com:mgmt:Extreme-lldp" xmlns:y="http://Extreme.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>Extreme 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
16r.1.00	This API call was introduced.

# protocol/loop-detection

Configures, modifies, or retrieves Global Loop Detection configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/loop-detection	Configures, modifies, or retrieves Global Loop Detection configuration.

GET URIs	Description
<base_URI>/config/running/protocol/loop-detection	Displays the Loop-Detection information.
<base_URI>/config/running/protocol/loop-detection/hello-interval	Displays the Hello Interval.
<base_URI>/config/running/protocol/loop-detection/shutdown-time	Displays the Shutdown Time.
<base_URI>/config/running/protocol/loop-detection/raslog-duration	Displays the interval between Raslogs.

PATCH URIs	Payload	Description
<base_URI>/config/running/protocol/loop-detection	<loop-detection><hello-interval>{uint32}</hello-interval></loop-detection>	Sets the Hello Interval globally.
<base_URI>/config/running/protocol/loop-detection	<loop-detection><shutdown-time>{uint32}</shutdown-time></loop-detection>	Sets the Shutdown Time globally.
<base_URI>/config/running/protocol/loop-detection	<loop-detection><raslog-duration>{uint32}</raslog-duration></loop-detection>	Sets interval between raslogs.

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/loop-detection/hello-interval	<hello-interval>{uint32}</hello-interval>	Sets the Hello Interval globally.
<base_URI>/config/running/protocol/loop-detection/shutdown-time	<shutdown-time>{uint32}</shutdown-time>	Sets the Shutdown Time globally.
<base_URI>/config/running/protocol/loop-detection/raslog-duration	<raslog-duration>{uint32}</raslog-duration>	Sets interval between Raslogs.

DELETE URIs
<base_URI>/config/running/protocol/loop-detection

## Parameters

### *hello-interval*

The rate, in milliseonds, at which the Loop Detection (LD) PDUs are transmitted by an LD-enabled interface/VLAN. Range 100 - 5000 ms. Default is 1000 ms.

### *shutdown-time*

The time duration, in minutes, after which the interface that got shutdown by Loop Detection protocol gets re-enabled automatically. Range 0 - 1440 minutes. Default is 0.

*raslog-duration*

The interval, in minutes, between raslogs when port is shutdown disabled for loop detection in order to avoid raslog flooding. Range 10 - 1440 minutes. Default is 10.

## 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/protocol/loop-detection

*Request Body*

None

*Response Body*

```
<loop-detection xmlns="urn:brocade.com:mgmt:brocade-eld" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/protocol/loop-detection">
  <hello-interval>101</hello-interval>
  <shutdown-time>4</shutdown-time>
  <raslog-duration>30</raslog-duration>
</loop-detection>
```

The following example uses the PATCH option to update the hello-interval attribute.

*URI*

http://host:80/rest/config/running/protocol/loop-detection

*Request Body*

```
<loop-detection><hello-interval>101</hello-interval></loop-detection>
```

*Response Body*

```
<loop-detection xmlns="urn:brocade.com:mgmt:brocade-eld" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/protocol/loop-detection">
  <hello-interval>101</hello-interval>
  <shutdown-time>4</shutdown-time>
  <raslog-duration>30</raslog-duration>
</loop-detection>
```

The following example uses the DELETE option to remove the loop detection configuration.

### *URI*

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

### *Request Body*

None

### *Response Body*

None

## History

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

# protocol/mrvp

Configures, modifies, or retrieves the Multiple VLAN Registration Protocol ( MRVP) protocol configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/protocol/mrvp	Configures, modifies, or retrieves the MRVP protocol globally.
<base_URI>/config/running/interface/Ethernet/%name%/mrpv/enable	Enables MRVP on an interface.
rest/config/running/protocol/mrpv/timer	Configures the MRVP global timer .
<base_URI/ rest/config/running/interface/Ethernet/%name%/mrpv/timer	Configures MRVP interface timer.

DELETE URIs
<base_URI>/config/running/protocol/mrvp

## Parameters

### *Ethernet*

Specifies the Ethernet interface.

### *Port-channel*

Specifies the Port-channel interface.

### *join-timer*

Specifies the join timer. The valid range is from 20 through 10000000 centiseconds. The default value is 20 centiseconds.

### *leave-timer*

Specifies the leave timer. The valid range is from 100 through 10000000 centiseconds. The default value is 100 centiseconds.

### *leave-all-timer*

Specifies the leave timer. The valid range is from 1000 through 10000000 centiseconds. The default value is 1000 centiseconds.

## Usage Guidelines

GET, PUT, and PATCH operations are supported.

## Examples

The following example shows how to enable MRVP globally.

### *URI*

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

### *Request Body*

None

### *Response Body*

None

The following example shows how to enable MRVP on an interface.

### *URI*

http://host:80/rest/config/running/interface/Ethernet/%name%/mvrp/enable

### *Request Body*

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

### *Response Body*

None

The following example shows how to configure global MRVP timer.

### *URI*

http://host:80/rest/config/running/protocol/mrvp/timer

### *Request Body*

```
<timer><join>%uint32%</join ><leave >%uint32%</leave ><leave-all>%uint32%</leave-all ></timer>
```

### *Response Body*

None

The following example shows how to configure MRVP interface timer.

### **URI**

http://host:80/rest/config/running/interface/Ethernet/%name%/mvrp/timer

### **Request Body**

```
<timer><join>%uint32%</join><leave >%uint32%</leave ><leave-all>%uint32%</leave-all ></timer>
```

### **Response Body**

None

## **History**

Release version	History
18r.1.00	This API call was introduced.



# protocol/spanning-tree/mstp

Configures 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
16r.1.00	This API call was introduced.

# protocol/spanning-tree/pvst

Configures 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

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/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
16r.1.00	This API call was introduced.

# protocol/spanning-tree/rpvst

Configures 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

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/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
16r.1.00	This API call was introduced.

# protocol/spanning-tree/rstp

Configures, retrieves, and modifies 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
16r.1.00	This API call was introduced.

# protocol/spanning-tree/stp

Configures 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
16r.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 PUT option to configure VRRP.

### **URI**

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

### **Request Body**

```
<vrrp>true</vrrp>
```

### **Response Body**

None

The following example uses the DELETE option to delete the VRRP configuration.

### **URI**

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

### **Request Body**

None

### **Response Body**

None

## History

Release version	History
16r.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 Virtual Router Redundancy Protocol Extended (VRRP-E).

PUT URIs	Payload	Description
<base_URI>/config/running/protocol/vrrp-extended	<vrrp-extended>{enumeration}</vrrp-extended>	Configures Virtual Router Redundancy Protocol Extended (VRRP-E).

## 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 PUT option to configure VRRP-E.

### **URI**

http://host:80/rest/config/running/protocol/vrrp-extended

### **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
16r.1.00	This API call was introduced.

# qos-mpls

Configures, retrieves, and modifies MPLS Quality of Service (QoS).

## Resource URIs

URI	Description
<base_URI>/config/running/qos-mpls	Configures MPLS Quality of Service (QoS).

GET URIs	Description
<base_URI>/config/running/qos-mpls	Retrieves and displays the information on all configured qos-mpls maps, and the details on applied maps.
<base_URI>/config/running/qos-mpls/map	Retrieves and displays the information on all configured qos-mpls maps.
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}	Retrieves and displays the EXP-to-Traffic-Class map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}	Specify the map name and exp value in the URI to retrieve the configured traffic-class and drop-precedence value.
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}/to	Specify the map name and exp value in the URI to retrieve the configured traffic-class and drop-precedence value.
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}	Retrieves and displays Traffic-Class-to-EXP map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}/traffic-class/{priority-in-values},{drop-precedence}	Specify the map name, traffic-class and drop-precedence values in the URI to retrieve the configured exp value.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}	Retrieves and displays the DSCP-to-EXP map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}/dscp/{dscp-in-values}	Specify the map name and DSCP value in the URI to retrieve the configured exp value.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}/dscp/{dscp-in-values}/to	Specify the map name and DSCP value in the URI to retrieve the configured exp value.
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}	Retrieves and displays the EXP-to-DSCP map information for the map name specified in the URI.
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}/exp/{exp-in-values}	Specify the map name and exp value in the URI to retrieve the configured dscp value.
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}/exp/{exp-in-values}/to	Specify the map name and exp value in the URI to retrieve the configured dscp value.
<base_URI>/config/running/qos-mpls/map-apply	Retrieves information about the qos-mpls map applied on the device.
<base_URI>/config/running/qos-mpls/map-apply/exp-traffic-class	Retrieves information about the qos-mpls map of type exp-traffic-class applied on the device.
<base_URI>/config/running/qos-mpls/map-apply/exp-traffic-class/All	If the qos-mpls map of type exp-traffic-class is applied, the value of the field "All" will be always true, which indicates that the map is globally applied. If the map is not applied, a "Not found" error will be returned.
<base_URI>/config/running/qos-mpls/map-apply/traffic-class-exp	Retrieves information about the qos-mpls map of type traffic-class-exp applied on the device.
<base_URI>/config/running/qos-mpls/map-apply/traffic-class-exp/All	If the qos-mpls map of type traffic-class-exp is applied. The value of the field "All" will be always true, which indicates that the map is globally applied. If the map is not applied, a "Not found" error will be returned.

GET URIs	Description
<base_URI>/config/running/qos-mpls/map-apply/dscp-exp	Retrieves information about the qos-mpls map of type dscp-exp applied on the device.
<base_URI>/config/running/qos-mpls/map-apply/dscp-exp/All	If the qos-mpls map of type dscp-exp is applied, the value of the field "All" will be always true, which indicates that the map is globally applied. If the map is not applied, a "Not found" error will be returned.
<base_URI>/config/running/qos-mpls/map-apply/exp-dscp	Retrieves information about the qos-mpls map of type exp-dscp applied on the device.
<base_URI>/config/running/qos-mpls/map-apply/exp-dscp/All	If the qos-mpls map of type exp-dscp is applied, the value of the field "All" will be always true, which indicates that the map is globally applied. If the map is not applied, a "Not found" error will be returned.

POST URIs	Payload	Description
<base_URI>/config/running/qos-mpls/map	<exp-traffic-class><exp-traffic-class-map-name>{map-name-type}</exp-traffic-class-map-name></exp-traffic-class>	Configures EXP traffic class
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}	<exp><exp-in-values>{uint32}</exp-in-values><to><traffic-class>{uint32}</traffic-class><drop-precedence>{uint32}</drop-precedence></to></exp>	Maps EXP values to Traffic Class Value.
<base_URI>/config/running/qos-mpls/map	<traffic-class-exp><traffic-class-exp-map-name>{map-name-type}</traffic-class-exp-map-name></traffic-class-exp>	Configures Traffic class EXP
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}	<traffic-class><priority-in-values>{uint32}</priority-in-values><drop-precedence>{uint32}</drop-precedence><to>{enumeration}</to><exp>{uint32}</exp></traffic-class>	Maps Traffic class value to EXP value
<base_URI>/config/running/qos-mpls/map	<dscp-exp><dscp-exp-map-name>{map-name-type}</dscp-exp-map-name></dscp-exp>	Configures DSCP EXP.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}	<dscp><dscp-in-values>{uint32}</dscp-in-values><to><exp>{uint32}</exp></to></dscp>	Maps DSCP value to EXP value.
<base_URI>/config/running/qos-mpls/map	<exp-dscp><exp-dscp-map-name>{map-name-type}</exp-dscp-map-name></exp-dscp>	Configures EXP DSCP.
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}	<exp><exp-in-values>{uint32}</exp-in-values><to><dscp>{uint32}</dscp></to></exp>	Maps EXP value to DSCP value

PATCH URIs	Payload	Description
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}/to	<to><traffic-class>{uint32}</traffic-class><drop-precedence>{uint32}</drop-precedence></to>	Updates the configured traffic-class and drop-precedence value in the exp-traffic-Class map specified.
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}/traffic-class/{priority-in-values},{drop-precedence}/to	<to><exp>{uint32}</exp></to>	Updates the configured exp value in traffic-class-exp map specified.
<base_URI>/config/running/qos-mpls/map/dscp-exp/{dscp-exp-map-name}/dscp/{dscp-in-values}/to	<to><exp>{uint32}</exp></to>	Updates the configured exp value in the dscp-exp map specified.

PATCH URIs	Payload	Description
<base_URI>/config/running/qos-mpls/map/exp-dscp/{exp-dscp-map-name}/exp/{exp-in-values}/to	<to><dscp>{uint32}</dscp></to>	Updates the configured dscp value in the exp-dscp map specified.

PUT URIs	Payload	Description
<base_URI>/config/running/qos-mpls/map-apply/traffic-class-exp	<traffic-class-exp><map-name-cmd2>{map-name-type}</map-name-cmd2><All>{enumeration}</All></traffic-class-exp>	Applies the qos-mpls map name provided in payload of type traffic-class-exp globally.
<base_URI>/config/running/qos-mpls/map-apply/traffic-class-exp	<traffic-class-exp><all-zero-map>{enumeration}</all-zero-map><All>{enumeration}</All></traffic-class-exp>	Applies the qos-mpls all-zero-map of type traffic-class-exp globally.
<base_URI>/config/running/qos-mpls/map-apply/traffic-class-exp	<traffic-class-exp><default-map>{enumeration}</default-map><All>{enumeration}</All></traffic-class-exp>	Applies the qos-mpls default-map of type traffic-class-exp globally.
<base_URI>/config/running/qos-mpls/map-apply/dscp-exp	<dscp-exp><map-name-cmd3>{map-name-type}</map-name-cmd3><All>{enumeration}</All></dscp-exp>	Applies the qos-mpls map name provided in payload of type dscp-exp globally.
<base_URI>/config/running/qos-mpls/map-apply/dscp-exp	<dscp-exp><all-zero-map>{enumeration}</all-zero-map><All>{enumeration}</All></dscp-exp>	Applies the qos-mpls all-zero-map of type traffic-class-exp globally.
<base_URI>/config/running/qos-mpls/map-apply/dscp-exp	<dscp-exp><default-map>{enumeration}</default-map><All>{enumeration}</All></dscp-exp>	Applies the qos-mpls default-map of type traffic-class-exp globally.
<base_URI>/config/running/qos-mpls/map-apply/exp-dscp	<exp-dscp><map-name-cmd4>{map-name-type}</map-name-cmd4><All>{enumeration}</All></exp-dscp>	Applies the qos-mpls map name provided in payload of type exp-dscp globally.
<base_URI>/config/running/qos-mpls/map-apply/exp-dscp	<exp-dscp><all-zero-map>{enumeration}</all-zero-map><All>{enumeration}</All></exp-dscp>	Applies the qos-mpls all-zero-map of type exp-dscp globally.
<base_URI>/config/running/qos-mpls/map-apply/exp-dscp	<exp-dscp><default-map>{enumeration}</default-map><All>{enumeration}</All></exp-dscp>	Applies the qos-mpls default-map of type exp-dscp globally.
<base_URI>/config/running/qos-mpls/map-apply/exp-traffic-class	<exp-traffic-class><map-name-cmd1>{map-name-type}</map-name-cmd1><All>true</All></exp-traffic-class>	Applies the qos-mpls map name provided in payload of type exp-traffic-class globally.
<base_URI>/config/running/qos-mpls/map-apply/exp-traffic-class	<exp-traffic-class><all-zero-map>true</all-zero-map><All>true</All></exp-traffic-class>	Applies the qos-mpls all-zero-map of type exp-traffic-class globally.
<base_URI>/config/running/qos-mpls/map-apply/exp-traffic-class	<exp-traffic-class><default-map>true</default-map><All>true</All></exp-traffic-class>	Applies the qos-mpls default-map of type exp-traffic-class globally.

DELETE URIs
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}
<base_URI>/config/running/qos-mpls/map/exp-traffic-class/{exp-traffic-class-map-name}/exp/{exp-in-values}
<base_URI>/config/running/qos-mpls/map/traffic-class-exp/{traffic-class-exp-map-name}
<base_URI>/config/running/qos-mpls/map-apply
<base_URI>/config/running/qos-mpls/map-apply/exp-traffic-class

DELETE URIs
<base_URI>/config/running/qos-mpls/map-apply/traffic-class-exp
<base_URI>/config/running/qos-mpls/map-apply/dscp-exp
<base_URI>/config/running/qos-mpls/map-apply/exp-dscp

## Parameters

<exp-in-values>

Specifies the EXP Traffic Class value. Valid values range from 0 through 7.

<traffic-class>

Specifies the traffic class value. The range is from 0 through 7.

<drop-precedence>

Specifies the drop precedence value. Valid values range from 0 through 3.

<exp>

Specifies the exp value. Valid values range from 0 through 7.

<priority-in-values>

Specifies the traffic class (priority queue) value. Valid values range from 0 through 7.

<dscp-in-values>

Specifies the DSCP value. Valid values range from 0 through 63.

<dscp>

Specifies the DSCP value. Valid values range from 0 through 63.

## 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/qos-mpls

### Request Body

None

### Response Body

```
<qos-mpls xmlns="urn:brocade.com:mgmt:brocade-qos-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/qos-mpls">
  <map y:self="/rest/config/running/qos-mpls/map">
    <exp-traffic-class y:self="/rest/config/running/qos-mpls/map/exp-traffic-class/e2tc1">
      <exp-traffic-class-map-name>e2tc1</exp-traffic-class-map-name>
      <exp y:self="/rest/config/running/qos-mpls/map/exp-traffic-class/e2tc1/exp/3">
        <exp-in-values>3</exp-in-values>
        <to y:self="/rest/config/running/qos-mpls/map/exp-traffic-class/e2tc1/exp/3/to">
          <traffic-class>5</traffic-class>
          <drop-precedence>1</drop-precedence>
        </to>
      </exp>
    </exp-traffic-class>
    <traffic-class-exp y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1">
      <traffic-class-exp-map-name>tc2e1</traffic-class-exp-map-name>
      <traffic-class y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1/traffic-class/5%2C0">
        <priority-in-values>5</priority-in-values>
        <drop-precedence>0</drop-precedence>
        <to y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1/traffic-class/5%2C0/to">
          <exp>7</exp>
        </to>
      </traffic-class>
      <traffic-class y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1/traffic-class/5%2C2">
        <priority-in-values>5</priority-in-values>
        <drop-precedence>2</drop-precedence>
        <to y:self="/rest/config/running/qos-mpls/map/traffic-class-exp/tc2e1/traffic-class/5%2C2/to">
          <exp>7</exp>
        </to>
      </traffic-class>
    </traffic-class-exp>
    <dscp-exp y:self="/rest/config/running/qos-mpls/map/dscp-exp/d2e1">
      <dscp-exp-map-name>d2e1</dscp-exp-map-name>
      <dscp y:self="/rest/config/running/qos-mpls/map/dscp-exp/d2e1/dscp/1">
        <dscp-in-values>1</dscp-in-values>
        <to y:self="/rest/config/running/qos-mpls/map/dscp-exp/d2e1/dscp/1/to">
          <exp>4</exp>
        </to>
      </dscp>
    </dscp-exp>
    <exp-dscp y:self="/rest/config/running/qos-mpls/map/exp-dscp/e2d1">
      <exp-dscp-map-name>e2d1</exp-dscp-map-name>
      <exp y:self="/rest/config/running/qos-mpls/map/exp-dscp/e2d1/exp/5">
        <exp-in-values>5</exp-in-values>
        <to y:self="/rest/config/running/qos-mpls/map/exp-dscp/e2d1/exp/5/to">
          <dscp>34</dscp>
        </to>
      </exp>
    </exp-dscp>
  </map>
```

```

<map-apply xmlns="urn:brocade.com:mgmt:brocade-apply-qos-mpls" y:self="/rest/config/running/qos-mpls/
map-apply">
  <exp-traffic-class y:self="/rest/config/running/qos-mpls/map-apply/exp-traffic-class">
    <map-name-cmd1>e2tc1</map-name-cmd1>
    <All>true</All>
  </exp-traffic-class>
  <traffic-class-exp y:self="/rest/config/running/qos-mpls/map-apply/traffic-class-exp">
    <map-name-cmd2>tc2e1</map-name-cmd2>
    <All>true</All>
  </traffic-class-exp>
  <dscp-exp y:self="/rest/config/running/qos-mpls/map-apply/dscp-exp">
    <map-name-cmd3>d2e1</map-name-cmd3>
    <All>true</All>
  </dscp-exp>
  <exp-dscp y:self="/rest/config/running/qos-mpls/map-apply/exp-dscp">
    <map-name-cmd4>e2d1</map-name-cmd4>
    <All>true</All>
  </exp-dscp>
</map-apply>
</qos-mpls>

```

The following example uses the POST option to configure EXP traffic class.

### URI

http://host:80/rest/config/running/qos-mpls/map

### Request Body

```
<exp-traffic-class><exp-traffic-class-map-name>plsmap</exp-traffic-class-map-name></exp-traffic-class>
```

### Response Body

None

The following example uses the DELETE option to remove dot1x.

### URI

http://host:80/rest/config/running/qos-mpls/map/exp-traffic-class/plsmap

### Request Body

None

### Response Body

None

## History

Release version	History
16r.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.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/source-interface	Retrieves Source Interface information.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/source-interface/source-interface-value	Displays Source Interface.

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.
<base_URI>/config/running/radius-server/host/{hostname};{use-vrf}/source-interface	<source-interface><source-interface-name>{track-iftyp}</source-interface-name><source-interface-value>{track-ifname}</source-interface-value></source-interface>	Sets source-interface for the RADIUS packets.

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.
<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.
<base_URI>/config/running/radius-server/host/{hostname},{use-vrf}/source-interface	<source-interface><source-interface-name>{track-iftyp}</source-interface-name><source-interface-value>{track-ifname}</source-interface-value></source-interface>	Sets source-interface for the RADIUS packets.

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
<base_URI>////running/radius-server/host/{hostname},{use-vrf}/source-interface

## 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.

*source-interface*

Specifies the Source interface to be used. Possible values are Ethernet, Loopback, VE, management.

## 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
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include source-interface URIs.

# 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
5.0.0	This API call was introduced.

Release version	History
16r.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/ap/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



GET URIs	Description
<base_URI>/config/running/route-map/{name},{action-rm},{instance}/set/ip/interface/null0	Sends traffic to a Null0 Interface.
<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>
    </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
16r.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	Displays local AS number.
<base_URI>/config/running/router/bgp/always-compare-med	Displays whether the device is set to always compare the Multi-Exit Discriminators (MEDs).
<base_URI>/config/running/router/bgp/compare-med-empty- aspath	Displays whether comparison of Multi-Exit Discriminators (MEDs) for internal routes is enabled.
<base_URI>/config/running/router/bgp/med-missing-as-worst	Considers routes missing MED attributes as least desirable.
<base_URI>/config/running/router/bgp/as-path-ignore	Displays whether the comparison of the autonomous system (AS) path lengths of otherwise equal paths is enabled.
<base_URI>/config/running/router/bgp/compare-routerid	Displays whether comparison of device IDs is enabled.
<base_URI>/config/running/router/bgp/install-igp-cost	Enables the device to use the IGP cost instead of the default BGP4 or BGP4+ Multi-Exit Discriminator (MED) value.
<base_URI>/config/running/router/bgp/cluster-id	Configures Route-Reflector Cluster-ID.
<base_URI>/config/running/router/bgp/default-local-preference	Specifies the local preference value. The value can range from 0 through 65535.
<base_URI>/config/running/router/bgp/distance/lcl-route-distance	Specifies the local BGP4 and BGP4+ distance. The value can range from 1 through 255
<base_URI>/config/running/router/bgp/capability	Displays capability configuration.
<base_URI>/config/running/router/bgp/capability/as4-enable	Enables 4-byte autonomous system number (ASN) capability.
<base_URI>/config/running/router/bgp/maxas-limit/in/num-as-in- path	Configures the number of autonomous systems in the AS-PATH attribute.
<base_URI>/config/running/router/bgp/enforce-first-as	Enforces the use of the first autonomous system (AS) path for external BGP (EBGP) routes.
<base_URI>/config/running/router/bgp/fast-external-fallover	Resets the session if a link to an EBGP peer goes down.
<base_URI>/config/running/router/bgp/timers	Displays timers information.
<base_URI>/config/running/router/bgp/timers/hold-time	Displays the interval in seconds that a device waits to receive a keepalive message from a peer before declaring that peer dead.
<base_URI>/config/running/router/bgp/log-dampening-debug	Logs dampening debug messages.
<base_URI>/config/running/router/bgp/confederation	Displays confederation information.
<base_URI>/config/running/router/bgp/confederation/identifier	Specifies an autonomous system number (ASN).
<base_URI>/config/running/router/bgp/confederation/peers	Displays the autonomous system (AS) numbers for BGP peers that will belong to the confederation.
<base_URI>/config/running/router/bgp/neighbor	Displays neighbor router.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp	Displays neighbor peer group.
<base_URI>/config/running/router/bgp/neighbor/peer-grps/ neighbor-peer-grp/address	Displays neighbor address.

GET URIs	Description
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}/shutdown	Displays peer group shutdown status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/ospf	Displays OSPF redistribution status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/isis	Displays IS-IS redistribution status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/connected	Displays unicast connected mode configuration.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/redistribute/static	Displays unicast static mode configuration.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/ospf	Displays OSPF redistribution status.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/connected	Displays connected redistribution.
<base_URI>/config/running/router/bgp/address-family/ipv4/unicast/vrf/{vrf-name}/redistribute/static	Displays static redistribution.

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.



POST URIs	Payload	Description
<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	<isis></isis>	Configures ISIS 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.
<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.
<base_URI>/config/running/router/bgp/neighbor/neighbor-peer-grp/{group-name}	<peerGroup1><remote-as>{enumeration}</remote-as></peerGroup1>	Configures peer group Remote AS.

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.

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}
<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/isis
<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

## 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.

*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.

## Examples

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

### URI

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

### Request Body

None

### Response Body

```
<bgp xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/bgp/default">
  <local-as>124</local-as>
  <always-compare-med>true</always-compare-med>
  <compare-med-empty-aspath>true</compare-med-empty-aspath>
  <med-missing-as-worst>true</med-missing-as-worst>
  <as-path-ignore>true</as-path-ignore>
  <compare-routerid>true</compare-routerid>
  <install-igp-cost>true</install-igp-cost>
  <cluster-id y:self="/rest/config/running/router/bgp/default/cluster-id">
    <id>122</id>
  </cluster-id>
  <default-local-preference>100</default-local-preference>
  <distance y:self="/rest/config/running/router/bgp/default/distance">
    <ext-route-distance>20</ext-route-distance>
    <int-route-distance>25</int-route-distance>
    <lcl-route-distance>22</lcl-route-distance>
  </distance>
  <capability y:self="/rest/config/running/router/bgp/default/capability">
    <as4-enable>true</as4-enable>
  </capability>
  <maxas-limit y:self="/rest/config/running/router/bgp/default/maxas-limit">
    <in y:self="/rest/config/running/router/bgp/default/maxas-limit/in">
      <num-as-in-path>250</num-as-in-path>
    </in>
  </maxas-limit>
  <enforce-first-as>true</enforce-first-as>
  <fast-external-fallover>true</fast-external-fallover>
  <timers y:self="/rest/config/running/router/bgp/default/timers">
    <keep-alive>65</keep-alive>
    <hold-time>170</hold-time>
  </timers>
  <log-dampening-debug>true</log-dampening-debug>
  <auto-shutdown-new-neighbors>true</auto-shutdown-new-neighbors>
  <confederation y:self="/rest/config/running/router/bgp/default/confederation">
    <identifier>20000</identifier>
    <peers>100 120 130 140 1200 2300 5600 40000</peers>
  </confederation>
  <bfd xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/bgp/bfd">
    <holdover-interval>10</holdover-interval>
    <interval xmlns="urn:brocade.com:mgmt:brocade-bfd" y:self="/rest/config/running/router/bgp/bfd/interval">
      <min-tx>75</min-tx>
      <min-rx>80</min-rx>
      <multiplier>3</multiplier>
    </interval>
  </bfd>
  <neighbor y:self="/rest/config/running/router/bgp/default/neighbor/INTERNAL">
    <address>INTERNAL</address>
  </neighbor>
```

```

<neighbor y:self="/rest/config/running/router/bgp/default/neighbor/PeerGroup1">
  <address>PeerGroup1</address>
</neighbor>
<neighbor xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/router/bgp/neighbor">
  <neighbor-peer-grp y:self="/rest/config/running/router/bgp/neighbor/neighbor-peer-grp/peer1">
    <address>peer1</address>
    <bfd y:self="/rest/config/running/router/bgp/neighbor/neighbor-peer-grp/peer1/bfd">
      <holdover-interval>10</holdover-interval>
      <interval xmlns="urn:brocade.com:mgmt:brocade-bfd" y:self="/rest/config/running/router/bgp/
neighbor/neighbor-peer-grp/peer1/bfd/interval">
        <min-tx>70</min-tx>
        <min-rx>60</min-rx>
        <multiplier>10</multiplier>
      </interval>
    </bfd>
  </neighbor-peer-grp>
  <neighbor-ipv6-addr y:self="/rest/config/running/router/bgp/neighbor/neighbor-ipv6-addr/2004:384d::
21:22">
    <address>2004:384d::21:22</address>
    <bfd y:self="/rest/config/running/router/bgp/neighbor/neighbor-ipv6-addr/2004:384d::21:22/bfd">
      <holdover-interval>25</holdover-interval>
      <interval xmlns="urn:brocade.com:mgmt:brocade-bfd" y:self="/rest/config/running/router/bgp/
neighbor/neighbor-ipv6-addr/2004:384d::21:22/bfd/interval">
        <min-tx>60</min-tx>
        <min-rx>60</min-rx>
        <multiplier>40</multiplier>
      </interval>
    </bfd>
  </neighbor-ipv6-addr>
  <neighbor-addr xmlns="urn:brocade.com:mgmt:brocade-bgp" y:self="/rest/config/running/router/bgp/
neighbor/neighbor-addr/1.1.1.1">
    <address>1.1.1.1</address>
    <ebgp-btsh></ebgp-btsh>
    <bfd y:self="/rest/config/running/router/bgp/neighbor/neighbor-addr/1.1.1.1/bfd">
      <holdover-interval>20</holdover-interval>
      <interval xmlns="urn:brocade.com:mgmt:brocade-bfd" y:self="/rest/config/running/router/bgp/
neighbor/neighbor-addr/1.1.1.1/bfd/interval">
        <min-tx>5000</min-tx>
        <min-rx>3000</min-rx>
        <multiplier>4</multiplier>
      </interval>
    </bfd>
  </neighbor-addr>
</neighbor>
<neighbor y:self="/rest/config/running/router/bgp/default/neighbor/VCS_8192">
  <address>VCS_8192</address>
</neighbor>
<address-family y:self="/rest/config/running/router/bgp/default/address-family">
  <ipv4 y:self="/rest/config/running/router/bgp/default/address-family/ipv4">
    <unicast y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast">
      <bgp-redistribute-internal>true</bgp-redistribute-internal>
      <redistribute y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
redistribute">
        <connected y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
redistribute/connected">
          <redistribute-connected>true</redistribute-connected>
          <metric>23</metric>
          <route-map>routel</route-map>
        </connected>
        <ospf y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
redistribute/ospf">
          <redistribute-ospf>true</redistribute-ospf>
          <match y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
redistribute/ospf/match"/>
            <metric>26</metric>
          </ospf>
          <static y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
redistribute/static">
            <redistribute-static>true</redistribute-static>
            <metric>30</metric>
            <route-map>routel</route-map>
          </static>
        </redistribute>
      </unicast>
    </ipv4>
  </address-family>

```



```

    </static>
  </redistribute>
  <aggregate-address y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
aggregate-address/%2210.11.12.0/24%22">
    <aggregate-ip-prefix>10.11.12.0/24</aggregate-ip-prefix>
    <advertise-map>map2</advertise-map>
    <as-set>true</as-set>
    <attribute-map>map2</attribute-map>
    <summary-only>true</summary-only>
    <suppress-map>map1</suppress-map>
  </aggregate-address>
  <neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/neighbor/
INTERNAL">
    <address>INTERNAL</address>
  </neighbor>
  <neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/neighbor/
10.11.132.7">
    <address>10.11.132.7</address>
  </neighbor>
  <neighbor xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/neighbor">
    <af-ipv4-neighbor-address y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/
neighbor/af-ipv4-neighbor-address/1.1.1.1">
      <address>1.1.1.1</address>
      <activate>true</activate>
    </af-ipv4-neighbor-address>
  </neighbor>
  <neighbor xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/neighbor">
    <af-ipv4-neighbor-address xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://
brocade.com/ns/rest" y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/neighbor/af-
ipv4-neighbor-address/10.10.10.1">
      <address>10.10.10.1</address>
      <route-reflector-client>true</route-reflector-client>
      <additional-paths y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/
neighbor/af-ipv4-neighbor-address/10.10.10.1/additional-paths">
        <advertise y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/
neighbor/af-ipv4-neighbor-address/10.10.10.1/additional-paths/advertise">
          <best>1</best>
        </advertise>
      </additional-paths>
      <capability y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/neighbor/af-
ipv4-neighbor-address/10.10.10.1/capability">
        <additional-paths y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/
neighbor/af-ipv4-neighbor-address/10.10.10.1/capability/additional-paths">
          <add-path-both>true</add-path-both>
          <receive>true</receive>
        </additional-paths>
      </capability>
    </af-ipv4-neighbor-address>
  </neighbor>
  <network y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/network/
%2210.11.12.0/24%22">
    <network-ipv4-address>10.11.12.0/24</network-ipv4-address>
    <weight>100</weight>
    <backdoor>true</backdoor>
    <route-map>map1</route-map>
  </network>
  <static-network y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
static-network/%2210.10.12.0/24%22">
    <static-network-address>10.10.12.0/24</static-network-address>
    <distance>10</distance>
  </static-network>
  <maximum-paths y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
maximum-paths">
    <ebgp>2</ebgp>
    <ibgp>3</ibgp>
    <use-load-sharing>true</use-load-sharing>
  </maximum-paths>
  <multipath y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
multipath">
    <ibgp>true</ibgp>

```

```

    <multi-as>true</multi-as>
  </multipath>
  <always-propagate>true</always-propagate>
  <default-information-originate>true</default-information-originate>
  <rib-route-limit>2000</rib-route-limit>
  <dampening y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
dampening">
    <half-time>20</half-time>
    <reuse-value>755</reuse-value>
    <start-suppress-time>2100</start-suppress-time>
    <max-suppress-time>45</max-suppress-time>
  </dampening>
  <default-metric>1</default-metric>
  <table-map y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/table-
map"/>
  <update-time>10</update-time>
  <graceful-restart y:self="/rest/config/running/router/bgp/default/address-family/ipv4/unicast/
graceful-restart">
    <restart-time>250</restart-time>
    <purge-time>200</purge-time>
    <stale-routes-time>300</stale-routes-time>
  </graceful-restart>
  <vrf y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/vrf/red">
    <vrf-name>red</vrf-name>
    <redistribute y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/vrf/red/
redistribute">
      <bgp y:self="/rest/config/running/router/bgp/address-family/ipv4/unicast/vrf/red/
redistribute/bgp">
        <metric>250</metric>
        <route-map>map1</route-map>
      </bgp>
    </redistribute>
  </vrf>
</unicast>
</ipv4>
<ipv6 y:self="/rest/config/running/router/bgp/default/address-family/ipv6">
  <unicast y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast">
    <bgp-redistribute-internal>true</bgp-redistribute-internal>
    <redistribute y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
redistribute">
      <connected y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
redistribute/connected">
        <redistribute-connected>true</redistribute-connected>
        <metric>23</metric>
      </connected>
      <ospf y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
redistribute/ospf">
        <redistribute-ospf>true</redistribute-ospf>
        <match y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
redistribute/ospf/match"/>
          <metric>34</metric>
        </ospf>
        <static y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
redistribute/static">
          <redistribute-static>true</redistribute-static>
          <metric>45</metric>
          <route-map>redist107_1</route-map>
        </static>
      </redistribute>
      <aggregate-address y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
aggregate-address/%22fd80:122:122:122::/64%22">
        <aggregate-ip-prefix>fd80:122:122:122::/64</aggregate-ip-prefix>
      </aggregate-address>
      <network y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/network/
%22131::1/128%22">
        <network-ipv6-address>131::1/128</network-ipv6-address>
      </network>
      <network y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/network/
%22fd80:122:122:122:105:105:0:122/128%22">
        <network-ipv6-
address>fd80:122:122:122:105:105:0:122/128</network-ipv6-address>
      </network>
      <neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/neighbor/

```

```

vcs_2122">
  <address>vcs_2122</address>
</neighbor>
<neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/neighbor/
VCS_8192_rr">
  <address>VCS_8192_rr</address>
</neighbor>
<neighbor y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/neighbor/
fd80:2001:2040::40">
  <address>fd80:2001:2040::40</address>
</neighbor>
<neighbor xmlns="urn:brocade.com:mgmt:brocade-bgp" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor">
  <af-ipv6-neighbor-address y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124">
    <address>2001:2018:8192::124</address>
    <send-community y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/send-community">
      </send-community>
    <capability y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-
ipv6-neighbor-address/2001:2018:8192::124/capability">
      <orf y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6-
neighbor-address/2001:2018:8192::124/capability/orf">
        <prefixlist y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/capability/orf/prefixlist">
          </prefixlist>
        </orf>
      <additional-paths y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/capability/additional-paths">
        </additional-paths>
      </capability>
    <additional-paths y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/additional-paths">
      <advertise y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/additional-paths/advertise">
        </advertise>
      </additional-paths>
    <activate>true</activate>
    <allowas-in>3</allowas-in>
    <enable-peer-as-check>true</enable-peer-as-check>
    <filter-list y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/filter-list">
      </filter-list>
    <maximum-prefix y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/maximum-prefix">
      </maximum-prefix>
    <default-originate y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/default-originate">
      </default-originate>
    <prefix-list y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/prefix-list">
      </prefix-list>
    <route-map y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-
ipv6-neighbor-address/2001:2018:8192::124/route-map">
      <in y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6-
neighbor-address/2001:2018:8192::124/route-map/in">
        </in>
      <out y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/neighbor/af-ipv6-
neighbor-address/2001:2018:8192::124/route-map/out">
        </out>
      </route-map>
    <unsuppress-map y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/
neighbor/af-ipv6-neighbor-address/2001:2018:8192::124/unsuppress-map">
      </unsuppress-map>
    </af-ipv6-neighbor-address>
  </neighbor>
<maximum-paths y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
maximum-paths">
  <ebgp>2</ebgp>
  <ibgp>2</ibgp>
  <use-load-sharing>true</use-load-sharing>
</maximum-paths>

```

```

    <multipath y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
multipath"/>
    <always-propagate>true</always-propagate>
    <default-information-originate>true</default-information-originate>
    <rib-route-limit>1000</rib-route-limit>
    <dampening y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
dampening">
    <half-time>30</half-time>
    <reuse-value>1100</reuse-value>
    <start-suppress-time>2100</start-suppress-time>
    <max-suppress-time>45</max-suppress-time>
    </dampening>
    <default-metric>2</default-metric>
    <table-map y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/table-
map"/>
    <update-time>10</update-time>
    <graceful-restart y:self="/rest/config/running/router/bgp/default/address-family/ipv6/unicast/
graceful-restart">
    <restart-time>1400</restart-time>
    <purge-time>1200</purge-time>
    <stale-routes-time>1600</stale-routes-time>
    </graceful-restart>
    <vrf y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/vrf/vrf1">
    <vrf-name>vrf1</vrf-name>
    <redistribute y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/vrf/vrf1/
redistribute">
    <bgp y:self="/rest/config/running/router/bgp/address-family/ipv6/unicast/vrf/vrf1/
redistribute/bgp">
    <metric>500</metric>
    <route-map>map2</route-map>
    </bgp>
    </redistribute>
    </vrf>
    </unicast>
  </ipv6>
</address-family>
</bgp>

```

The following is an example of the POST operation to configure BGP 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
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include BGP GET requests.

# router/isis

Configures IS-IS protocol.

## Resource URIs

URI	Description
<base_URI>/config/running/router/isis	Configures IS-IS protocol.

GET URIs	Description
<base_URI>/config/running/router/isis	Enables IS-IS.
<base_URI>/config/running/router/isis/net/{net-cmd}	Defines NSAP address.
<base_URI>/config/running/router/isis/auth-check	Authenticate incoming PDUs for LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-1	Authenticate incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-1/disable	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2	Authenticate incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2/disable	Disables the authenticate incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode	Define authentication mode.
<base_URI>/config/running/router/isis/auth-mode/md5	HMAC-MD5 authentication.
<base_URI>/config/running/router/isis/auth-mode/md5/level-1	Authentication mode for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5/level-2	Authentication mode for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-key	Define authentication key
<base_URI>/config/running/router/isis/auth-key/level-1	Auth-key for Level-1 ISIS Router
<base_URI>/config/running/router/isis/auth-key/level-2	Auth-key for Level-2 ISIS Router
<base_URI>/config/running/router/isis/csnp-interval	Rate of transmission of CSNPs
<base_URI>/config/running/router/isis/disable-inc-stct-spf-opt	Disables Incremental Shortcut SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/disable-incremental-spf-opt	Disables Incremental SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/disable-partial-spf-opt	Disables Partial SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/fast-flood	Defines the number of LSPs to be flooded before SPF Run
<base_URI>/config/running/router/isis/fast-flood/fast-flood-value	The number of LSPs to be flooded before SPF Run. Range is 1-15; default is 4
<base_URI>/config/running/router/isis/graceful-restart	Enables the ISIS graceful restart capability
<base_URI>/config/running/router/isis/graceful-restart/helper-disable	Disables Helper Mode
<base_URI>/config/running/router/isis/hostname	Integrated IS-IS dynamic hostname
<base_URI>/config/running/router/isis/hostname/disable	Disables integrated IS-IS dynamic hostname
<base_URI>/config/running/router/isis/is-type	Define inter-area/intra area operation mode
<base_URI>/config/running/router/isis/log	Enable Logging IS-IS activities
<base_URI>/config/running/router/isis/log/adjacency	Logging Adjacency Changes
<base_URI>/config/running/router/isis/log/invalid-lsp-packets	Logging Invalid LSP Packets
<base_URI>/config/running/router/isis/lsp-gen-interval	Minimum interval between regenerating same LSP

GET URIs	Description
<base_URI>/config/running/router/isis/lsp-interval	Rate of transmission of LSPs
<base_URI>/config/running/router/isis/lsp-refresh-interval	LSP refresh interval
<base_URI>/config/running/router/isis/max-lsp-lifetime	Maximum LSP lifetime
<base_URI>/config/running/router/isis/nonstop-routing	Enables the ISIS nonstop routing capability
<base_URI>/config/running/router/isis/partial-spf-interval	Partial SPF Calculation Timers
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-max-hold-time	Max hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-init-delay	Initial delay (msec) between receiving a LSP change to PSPF calculation. Range is 0-120000. Default is 2000.
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-hold-time	Hold time (msec) between two PSPF calculations. 0-120000. Default is 5000
<base_URI>/config/running/router/isis/retransmit-interval	Time between retransmission of LSP.
<base_URI>/config/running/router/isis/set-debug	Enabling isis debug configuration.
<base_URI>/config/running/router/isis/set-debug/nsr	Sets nsr debug.
<base_URI>/config/running/router/isis/set-overload-bit	Configures a device to signal other devices not to use it as an intermediate hop in their shortest path first (SPF) calculations if an IS's resources are overloaded and are preventing the IS from properly performing IS-IS routing.
<base_URI>/config/running/router/isis/set-overload-bit/on-startup	Set overload-bit only temporarily on reboot.
<base_URI>/config/running/router/isis/spf-interval/level-1	SPF calculation Timers
<base_URI>/config/running/router/isis/reverse-metric	Configure IS-IS reverse metric at the router level.
<base_URI>/config/running/router/isis/reverse-metric/reverse_metric_tlv	Configure reverse metric TLV.
<base_URI>/config/running/router/isis/reverse-metric/tlv-type	Configure reverse metric TLV type.
<base_URI>/config/running/router/isis/reverse-metric/rev-metric-val	Configure IS-IS reverse metric value.
<base_URI>/config/running/router/isis/reverse-metric/whole-lan	Change metric for whole LAN.
<base_URI>/config/running/router/isis/reverse-metric/te-def-metric	Update TE default metric sub-tlv.
<base_URI>/config/running/router/isis/address-family	Enter Address Family command mode.
<base_URI>/config/running/router/isis/address-family/ipv4	IPv4 address Family.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	IPv4 unicast address Family.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style	Use narrow or wide metric type.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide	Use new style of TLVs to carry wider metric.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-1	Level-1 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-2	Level-2 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/summary-address/{summary-ip},{summary-ip-mask}	Configure Integrated IS-IS address summaries
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/summary-address/{summary-ip},{summary-ip-mask}/level-1	Configure Integrated IS-IS address summaries.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync	Enable LDP-SYNC on all eligible ISIS interfaces.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync/hold-down	Length (in seconds) of hold-down timer. Range is 1-65535.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric	Default Link Metric.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric/level-1	Default Link Metric for Level-1.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric/level-2	Default Link Metric for Level-2.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate	Controls origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/route-map	Uses route map.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/default-information-originate-cr	Controls origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-metric	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/distance	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/maximum-paths	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute	Redistributes information from another routing protocol.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected	Redistributes information from connected routing protocol.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf	Specifies the OSPF protocol.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match	Redistribution of OSPF routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/internal	Internal routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external1	External type 1 routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external2	External type 2 routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static	Static routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/route-map	Route map reference.



GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp	BGP routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/metric	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis	ISIS routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1	Level-1 routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1/into	Level-1 routes information.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1/into/level-2	Level-1 routes into Level-2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2	Level-2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into	Level-2 routes into level-1.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1	Level-2 routes into Level-1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1/prefix-list	Select routes using prefix-list.
<base_URI>/config/running/router/isis/address-family/ipv6	IPv6 address Family.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	IPv6 unicast address Family.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/disable-adjacency-check	Disables IPv6 Support consistency check.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}	Configure Integrated IS-IS address summaries
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}/level-2	Configure Integrated IS-IS address summaries for Level-2.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric	Default Link Metric.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric/level-1	Default Link Metric for Level-1.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric/level-2	Default Link Metric for Level-2.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology	Enable/disable ISIS multi-topology extension for this address family.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology/transition	Accept and generate both ISIS IPv6 and Multi-topology IPv6 TLVs.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/spf-interval/level-1	SPF calculation Timers
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval	Partial SPF Calculation Timers.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-max-hold-time	Max hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-init-delay	Initial delay (msec) between receiving a LSP change to PSPF calculation. Range is 0-120000. Default is 2000.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-hold-time	Hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate	Control origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate/route-map	Use route map.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate/default-information-originate-cr	Control origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-metric	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/distance	Define an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/maximum-paths	Calculate multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute	Redistribute information from another routing protocol.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected	Connected.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf	Open Shortest Path First.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match	Redistribution of OSPF routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/internal	Internal routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external1	External type 1 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external2	External type 2 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static	Static routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric-type	IS-IS metric type for redistributed routes.

GET URIs	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp	Bgp routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/metric	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/route-map	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/metric-type	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis	ISIS routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-1	Level-1 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-1/into	Level-1 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-1/into/level-2	Level-1 routes into Level-2.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2	Level-2 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into	Level-2 routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/level-1	Level-2 routes into Level-1.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/level-1/prefix-list	Select routes using prefix-list.

POST URIs	Payload	Description
<base_URI>/config/running/router	<isis />	Configures IS-IS Protocol (ISIS).
<base_URI>/config/running/router/isis	<net><net-cmd>{net-cmd}</net-cmd></net>	Define NSAP address
<base_URI>/config/running/router/isis/fast-flood/	<fast-flood-value> {unit32} < /fast-flood-value >	Define number of LSPs to be flooded before SPF Run
<base_URI>/config/running/router/isis	<set-overload-bit></set-overload-bit>	Configures a device to signal other devices not to use it as an intermediate hop in their shortest path first (SPF) calculations if an IS's resources are overloaded and are preventing the IS from properly performing IS-IS routing.
<base_URI>/config/running/router/isis	<spf-interval><spf-interval-level>level-1</spf-interval-level><spf-interval-max-hold-time>{unit32}</spf-interval-max-hold-time><spf-interval-initial-delay>{unit32}</spf-interval-initial-delay><spf-interval-hold-time>{unit32}</spf-interval-hold-time></spf-interval>	SPF calculation Timers.
<base_URI>/config/running/router/isis	<reverse-metric></reverse-metric>	Configure IS-IS reverse metric at the router level.
<base_URI>/config/running/router/isis/address-family/ipv4	<unicast />	IPv4 unicast address Family
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<summary-address><summary-ip>{inet:ipv4-address}</summary-ip><summary-ip-mask>{inet:ipv4-address}</summary-ip-	Configures Integrated IS-IS address summaries.

POST URIs	Payload	Description
	mask<Level-1>{enumeration}</Level-1></summary-address>	
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<ldp-sync></ldp-sync>	Enable LDP-SYNC on all eligible ISIS interfaces
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute	<connected></connected>	Redistributes information from connected routing protocol.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute	<ospf></ospf>	Specifies the OSPF protocol.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute	<static></static>	Specifies the source protocol (static) from which routes are being redistributed.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute	<bgp></bgp>	Specifies the source protocol (BGP) from which routes are being redistributed.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into	<level-1 />	Redistributes Level 2 routes into Level 1.
<base_URI>/config/running/router/isis/address-family/ipv6	<unicast />	IPv6 unicast address Family
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/	<summary-prefix><summary-prefix-ipv6>{common-def:ipv6-address-prefix}</summary-prefix-ipv6><Level-1>true</Level-1></summary-prefix>	Configure Integrated IS-IS address summaries
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	<multi-topology></multi-topology>	Enables ISIS multi-topology extension for the address family
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	<spf-interval><spf6-interval-level>{enumeration}</spf6-interval-level><spf6-interval-max-hold-time>{unit32}</spf6-interval-max-hold-time><spf6-interval-initial-delay>{unit32}</spf6-interval-initial-delay><spf6-interval-hold-time>{unit32}</spf6-interval-hold-time></spf-interval>	SPF calculation Timers
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/	<connected></connected>	Redistributes information from connected routing protocol.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute	<ospf></ospf>	Specifies the OSPF protocol.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static	<static></static>	Specifies the source protocol (static) from which routes are being redistributed.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/	<bgp></bgp>	Specifies the source protocol (BGP) from which routes are being redistributed.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/	<level-1></level-1>	Redistributes Level 2 routes into Level 1.

PUT URIs	Payload	Description
<base_URI>/config/running/router/isis/auth-check/level-1/disable	<disable>{enumeration}</disable>	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2/disable	<disable>{enumeration}</disable>	Disables the authentication of incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5/level-1	<level-1>{enumeration}</level-1>	Authentication mode for Level-1 LSPs, CSNP, and PSNP.

PUT URIs	Payload	Description
<base_URI>/config/running/router/isis/auth-mode/md5/level-2	<level-2>{enumeration}</level-2>	Authentication mode for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-key/level-1	<level-1>string</level-1>	Auth-key for Level-1 ISIS Router
<base_URI>/config/running/router/isis/auth-key/level-2	<level-2>string</level-2>	Auth-key for Level-2 ISIS Router
<base_URI>/config/running/router/isis/csnp-interval	<csnp-interval>{unit32}</csnp-interval>	Rate of transmission of CSNPs
<base_URI>/config/running/router/isis/disable-incremental-spf-opt	<disable-incremental-spf-opt>{enumeration}</disable-incremental-spf-opt>	Disables Incremental SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/disable-inc-stct-spf-opt	<disable-inc-stct-spf-opt>{enumeration}</disable-inc-stct-spf-opt>	Disables Incremental Shortcut SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/disable-partial-spf-opt	<disable-partial-spf-opt>{enumeration}</disable-partial-spf-opt>	Disables Partial SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/fast-flood/fast-flood-value	<fast-flood-value>{unit32}</fast-flood-value>	Defines the number of LSPs to be flooded before SPF Run
<base_URI>/config/running/router/isis/graceful-restart/helper-disable	<helper-disable>{enumeration}</helper-disable>	Disables Helper Mode
<base_URI>/config/running/router/isis/hostname/disable	<disable>{enumeration}</disable>	Disables integrated IS-IS dynamic hostname
<base_URI>/config/running/router/isis/is-type	<is-type>level-1</is-type>	Define inter-area/intra area operation mode
<base_URI>/config/running/router/isis/log/adjacency	<adjacency>{enumeration}</adjacency>	Logging Adjacency Changes
<base_URI>/config/running/router/isis/log/invalid-lsp-packets	<invalid-lsp-packets>{enumeration}</invalid-lsp-packets>	Logging Invalid LSP Packets
<base_URI>/config/running/router/isis/lsp-gen-interval	<lsp-gen-interval >{unit32}</lsp-gen-interval >	Minimum interval between regenerating same LSP
<base_URI>/config/running/router/isis/lsp-interval	<lsp-interval>{unit32}</lsp-interval>	Rate of transmission of LSPs
<base_URI>/config/running/router/isis/lsp-refresh-interval	<lsp-refresh-interval>{unit32}</lsp-refresh-interval>	LSP refresh interval
<base_URI>/config/running/router/isis/max-lsp-lifetime	<max-lsp-lifetime>{unit32}</max-lsp-lifetime>	Maximum LSP lifetime
<base_URI>/config/running/router/isis/nonstop-routing	<nonstop-routing>{enumeration}</nonstop-routing>	Enables the ISIS nonstop routing capability
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-max-hold-time	<pspf-max-hold-time>{unit32}</pspf-max-hold-time>	Max hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-init-delay	<pspf-init-delay>{unit32}</pspf-init-delay>	Initial delay (msec) between receiving a LSP change to PSPF calculation. Range is 0-120000. Default is 2000.
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-hold-time	<pspf-hold-time>{unit32}</pspf-hold-time>	Hold time (msec) between two PSPF calculations. 0-120000. Default is 5000
<base_URI>/config/running/router/isis/retransmit-interval	<retransmit-interval>{unit32}</retransmit-interval>	Time between retransmission of LSP.
<base_URI>/config/running/router/isis/set-debug/nsr	<nsr>{enumeration}</nsr>	Sets nsr debug.

PUT URIs	Payload	Description
<base_URI>/config/running/router/isis/set-overload-bit/on-startup/on-startup-overloadtime	<on-startup-overloadtime>{unit32}</on-startup-overloadtime>	Time in seconds to stay in overloaded state on reboot
<base_URI>/config/running/router/isis/reverse-metric/tlv-type	<tlv-type>{unit32}</tlv-type>	Configure reverse metric TLV type.
<base_URI>/config/running/router/isis/reverse-metric/rev-metric-val	<rev-metric-val>{unit32}</rev-metric-val>	Configure IS-IS reverse metric value.
<base_URI>/config/running/router/isis/reverse-metric/whole-lan	<whole-lan>{enumeration}</whole-lan>	Change metric for whole LAN.
<base_URI>/config/running/router/isis/reverse-metric/te-def-metric	<te-def-metric>{enumeration}</te-def-metric>	Update TE default metric sub-tlv
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-1	<level-1>{enumeration}</level-1>	Level-1 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-2	<level-2>{enumeration}</level-2>	Level-2 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/summary-address/{summary-ip},{summary-ip-mask}/Level-1	<Level-1>{enumeration}</Level-1>	Configure Integrated IS-IS address summaries.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync/hold-down	<hold-down>{unit32}</hold-down>	Length (in seconds) of hold-down timer. Range is 1-65535.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric/level-1	<level-1>{unit32}</level-1>	Default Link Metric for Level-1.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric/level-2	<level-2>{unit32}</level-2>	Default Link Metric for Level-2.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/default-information-originate-cr	<default-information-originate-cr>{enumeration}</default-information-originate-cr>	Controls origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/route-map	<route-map>{name}</routemap>	Uses route map.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-metric	<default-metric>{unit32}</default-metric>	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/distance	<distance>{unit32}</distance>	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/maximum-paths	<maximum-paths>{unit32}</maximum-paths>	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric	<metric>{unit32}</metric>	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric-type	<metric-type>internal</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/route-map	<route-map>{string}</route-map>	Route map reference.

PUT URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/internal	<internal>{enumeration}</internal>	Internal routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external1	<external1>{enumeration}</external1>	External type 1 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external2	<external2>{enumeration}</external2>	External type 2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric	<metric>{unit32}</metric>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/route-map	<route-map>route-map-static</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric-type	<metric-type>external</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric	<metric>{unit32}</metric>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric-type	<metric-type>external</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/route-map	<route-map>{string}</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only

PUT URIs	Payload	Description
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/redistribute/ static/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/ redistribute/bgp/metric	<metric>{unit32}</metric>	Metric for redistributed routes
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/ redistribute/bgp/metric-type	<metric-type>external</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/ redistribute/bgp/route-map	<route-map>{string}</route-map>	Route map reference
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/ redistribute/bgp/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/ redistribute/bgp/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/ redistribute/bgp/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>config/running/router/isis/ address-family/ipv4/unicast/redistribute/ isis/level-2/into/level-1/prefix-list	<prefix-list>isis-route-l2to1</prefix-list>	Selects routes using prefix-list
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/disable- adjacency-check	<disable-adjacency-check >{enumeration}< / disable-adjacency-check >	Disables IPv6 Support consistency check
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/summary- prefix/{summary-prefix-ipv6}/Level-2	<Level-2>{enumeration}</Level-2>	Configures Integrated IS-IS address summaries for Level-2.
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/default-link- metric/level-1	<level-1>{unit32}</level-1>	IS-IS Level-1 routes only
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/default-link- metric/level-2	<level-2>{unit32}</level-2>	IS-IS Level-2 routes only
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/multi-topology/ transition	<transition>{enumeration}</transition>	Accept and generate both ISIS IPv6 and Multi-topology IPv6 TLVs
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/partial-spf- interval/pspf-max-hold-time	<pspf-max-hold-time>{unit32}</pspf-max- hold-time>	Maximum hold time (msec) between two PSPF calculations
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/partial-spf- interval/pspf-init-delay	<pspf-init-delay>{unit32}</pspf-init-delay>	Initial delay (msec) between receiving a LSP change to PSPF calculation
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/partial-spf- interval/pspf-hold-time	<pspf-hold-time>{unit32}</pspf-hold-time>	Hold time (msec) between two PSPF calculations
<base_URI>config/running/router/isis/ address-family/ipv6/unicast/default- information-originate/default-information- originate-cr	<default-information-originate- cr>{enumeration}</default-information- originate-cr>	Controls origination of default route.



PUT URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate/route-map	<route-map>route-map-static</route-map>	Uses route map.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-metric	<default-metric>{unit32}</default-metric>	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/distance	<distance>{unit32}</distance>	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/maximum-paths	<maximum-paths>{unit32}</maximum-paths>	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric	<metric>{unit32}</metric>	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/route-map	<route-map>route-map-static</route-map>	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric-type	<metric-type>external</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/internal	<internal>{enumeration}</internal>	Internal routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external1	<external1>{enumeration}</external1>	External type 1 routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external2	<external2>{enumeration}</external2>	External type 2 routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric	<metric>{unit32}</metric>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/route-map	<route-map>ipv6-restapi</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric-type	<ospf><metric-type>external</metric-type></ospf>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only

PUT URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric	<metric>{unit32}</metric>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/route-map	<route-map>route-map-static</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric-type	<metric-type>external</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/metric	<metric>{unit32}</metric>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/route-map	<route-map>route-map-static</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/metric-type	<metric-type>external</metric-type>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/level-1/prefix-list	<prefix-list>isiv6-route-l2tol1</prefix-list>	Selects routes using prefix-list.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/auth-check/level-1	<level-1><disable>{enumeration}</disable></level-1>	Disables authentication of incoming PDUs for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-check/level-2	<level-2><disable>{enumeration}</disable></level-2>	Disables the authentication of incoming PDUs for Level-2 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5	<md5><level-1>{enumeration}</level-1></md5>	Authentication mode for Level-1 LSPs, CSNP, and PSNP.
<base_URI>/config/running/router/isis/auth-mode/md5	<md5><level-2>{enumeration}</level-2></md5>	Authentication mode for Level-2 LSPs, CSNP, and PSNP.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/auth-key	<auth-key><level-1>{string}</level-1>/auth-key>	Auth-key for Level-1 ISIS Router
<base_URI>/config/running/router/isis/auth-key	<auth-key><level-2>{string}</level-2>/auth-key>	Auth-key for Level-2 ISIS Router
<base_URI>/config/running/router/isis	<isis><csnp-interval>{unit32}</csnp-interval></isis>	Rate of transmission of CSNPs
<base_URI>/config/running/router/isis	<isis><disable-inc-stct-spf-opt>{enumeration}</disable-inc-stct-spf-opt></isis>	Disables Incremental Shortcut SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis	<isis><disable-incremental-spf-opt>{enumeration}</disable-incremental-spf-opt></isis>	Disables Incremental SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis	<isis><disable-partial-spf-opt>{enumeration}</disable-partial-spf-opt></isis>	Disables Partial SPF Optimizations; resorts to Full SPF
<base_URI>/config/running/router/isis/fast-flood	<fast-flood><fast-flood-value>{unit32}< /fast-flood-value > </fast-flood>	Defines the number of LSPs to be flooded before SPF Run
<base_URI>/config/running/router/isis/graceful-restart	<graceful-restart><helper-disable>{enumeration}</helper-disable></ graceful-restart>	Disables Helper Mode
<base_URI>/config/running/router/isis/hostname	<hostname><disable>{enumeration}</ disable></hostname>	Disables integrated IS-IS dynamic hostname
<base_URI>/config/running/router/isis	<isis><is-type>level-1</is-type></isis>	Define inter-area/intra area operation mode
<base_URI>/config/running/router/isis/log/	<log><adjacency>{enumeration}</ adjacency></log>	Logging Adjacency Changes
<base_URI>/config/running/router/isis/log/	<log><invalid-lsp-packets>{enumeration}</ invalid-lsp-packets></log>	Logging Invalid LSP Packets
<base_URI>/config/running/router/isis	<isis><lsp-gen-interval>{unit32}</lsp-gen-interval></isis>	Minimum interval between regenerating same LSP
<base_URI>/config/running/router/isis	<isis><lsp-interval>{unit32}</lsp-interval></ isis>	Rate of transmission of LSPs
<base_URI>/config/running/router/isis	<isis><lsp-refresh-interval>{unit32}</lsp-refresh-interval></isis>	LSP refresh interval
<base_URI>/config/running/router/isis	<isis><max-lsp-lifetime>{unit32}</max-lsp-lifetime></isis>	Maximum LSP lifetime
<base_URI>/config/running/router/isis	<isis><nonstop-routing>{enumeration}</ nonstop-routing></isis>	Enables the ISIS nonstop routing capability
<base_URI>/config/running/router/isis/partial-spf-interval	<partial-spf-interval><pspf-max-hold-time>{unit32}</pspf-max-hold-time></ partial-spf-interval>	Max hold time (msec) between two PSPF calculations. Range is 0-120000. Default is 5000.
<base_URI>/config/running/router/isis/partial-spf-interval	<partial-spf-interval><pspf-init-delay>{unit32}</pspf-init-delay></partial-spf-interval>	Initial delay (msec) between receiving a LSP change to PSPF calculation. Range is 0-120000. Default is 2000.
<base_URI>/config/running/router/isis/partial-spf-interval	<partial-spf-interval><pspf-hold-time>{unit32}</pspf-hold-time></partial-spf-interval>	Hold time (msec) between two PSPF calculations. 0-120000. Default is 5000
<base_URI>/config/running/router/isis	<isis><retransmit-interval>{unit32}</ retransmit-interval></isis>	Time between retransmission of LSP.
<base_URI>/config/running/router/isis/set-debug	<set-debug><nsr>{enumeration}</nsr></set-debug>	Sets nsr debug.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/spf-interval/level-1	<spf-interval><spf-interval-max-hold-time>{unit32}</spf-interval-max-hold-time><spf-interval-initial-delay>{unit32}</spf-interval-initial-delay><spf-interval-hold-time>{unit32}</spf-interval-hold-time></spf-interval>	Time in seconds to stay in overloaded state on reboot
<base_URI>/config/running/router/isis/reverse-metric	"<reverse-metric><tlv-type>{unit32}</tlv-type></reverse-metric>	Configure reverse metric TLV type.
<base_URI>/config/running/router/isis/reverse-metric	<reverse-metric><rev-metric-val><reverse-metric><te-def-metric>true</te-def-metric></reverse-metric></rev-metric-val></reverse-metric>	Configure IS-IS reverse metric value.
<base_URI>/config/running/router/isis/reverse-metric	<reverse-metric><whole-lan>{enumeration}</whole-lan></reverse-metric>	Change metric for whole LAN.
<base_URI>/config/running/router/isis/reverse-metric/	<reverse-metric><te-def-metric>{enumeration}</te-def-metric></reverse-metric>	Update TE default metric sub-tlv
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style	<metric-style><wide><level-1>{enumeration}</level-1></wide></metric-style>	Level-1 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/	<metric-style><wide><level-2>{enumeration}</level-2></wide></metric-style>	Level-2 only.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/summary-address/{summary-ip},{summary-ip-mask}	<summary-address><Level-1>{enumeration}</Level-1></summary-address>	Configure Integrated IS-IS address summaries.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync/	<ldp-sync><hold-down>{unit32}</hold-down></ldp-sync>	Length (in seconds) of hold-down timer. Range is 1-65535.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric	<default-link-metric><level-1>{unit32}</level-1></default-link-metric>	Default Link Metric for Level-1.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric	<default-link-metric><level-2>{unit32}</level-2></default-link-metric>	Default Link Metric for Level-2.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/	<default-information-originate><default-information-originate-cr>{enumeration}</default-information-originate-cr></default-information-originate>	Controls origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/	<default-information-originate><route-map>restapi</route-map></default-information-originate>	Uses route map.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<unicast><default-metric>{unit32}</default-metric></unicast>	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<unicast><distance>{unit32}</distance></unicast>	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast	<unicast><maximum-paths>{unit32}</maximum-paths></unicast>	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/	<connected><metric>{unit32}</metric></connected>	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/	<connected><metric-type>internal</metric-type></connected>	IS-IS metric type for redistributed routes.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/	<connected><route-map>restapi</route-map></connected>	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match	<match><internal>{enumeration}</internal></match>	Internal routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match	<match><external1>{enumeration}</external1></match>	External type 1 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match	<match><external2>{enumeration}</external2></match>	External type 2 routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/	<ospf><metric>{unit32}</metric></ospf>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/	<ospf><route-map>restapi</route-map></ospf>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/	<ospf><metric-type>external</metric-type></ospf>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/	<static><metric>{unit32}</metric></static>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/	<static><metric-type>external</metric-type></static>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/	<static><route-map>restapi</route-map></static>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>config/running/router/isis/address-family/ipv4/unicast/redistribute/static/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/	<bgp><metric>{unit32}</metric></bgp>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/	<bgp><metric-type>external</metric-type></bgp>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/	<route-map>{string}</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1	<level-1><prefix-list>hello</prefix-list></level-1>	Selects routes using prefix-list
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	<unicast><disable-adjacency-check>true</disable-adjacency-check></unicast>	Disables IPv6 Support consistency check
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}	<summary-prefix><Level-1>{enumeration}</Level-1></summary-prefix>	Configures Integrated IS-IS address summaries for Level-1.
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric	<default-link-metric><level-1>{unit32}</level-1></default-link-metric>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric	<default-link-metric><level-2>{unit32}</level-2></default-link-metric>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology	<multi-topology><transition>{enumeration}</transition></multi-topology>	Accept and generate both ISIS IPv6 and Multi-topology IPv6 TLVs
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/spf-interval/level-2	<spf-interval><spf6-interval-max-hold-time>{unit32}</spf6-interval-max-hold-time><spf6-interval-initial-delay>{unit32}</spf6-interval-initial-delay><spf6-interval-hold-time>{unit32}</spf6-interval-hold-time></spf-interval>	SPF calculation Timers.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval	<partial-spf-interval><pspf-max-hold-time>{unit32}</pspf-max-hold-time></partial-spf-interval>	Maximum hold time (msec) between two PSPF calculations
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval	<partial-spf-interval><pspf-init-delay>{unit32}</pspf-init-delay></partial-spf-interval>	Initial delay (msec) between receiving a LSP change to PSPF calculation

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval	<partial-spf-interval><pspf-hold-time>{unit32}</pspf-hold-time></partial-spf-interval>	Hold time (msec) between two PSPF calculations
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate	<default-information-originate><default-information-originate-cr>{enumeration}</default-information-originate-cr></default-information-originate>	Controls origination of default route.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate	<default-information-originate><route-map>ipv6-restapi</route-map></default-information-originate>	Uses route map.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	<unicast><default-metric>{unit32}</default-metric></unicast>	Metric for route redistribution.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	<unicast><distance>{unit32}</distance></unicast>	Defines an administrative distance.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast	<unicast><maximum-paths>{unit32}</maximum-paths></unicast>	Calculates multiple paths.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected	<connected><metric>{unit32}</metric></connected>	Metric for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected	<connected><route-map>ipv6-restapi</route-map></connected>	Route map reference.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected	<connected><metric-type>external</metric-type></connected>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match	<match><internal>{enumeration}</internal></match>	Internal routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match	<match><external1>{enumeration}</external1></match>	External type 1 routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match	<match><external2>{enumeration}</external2></match>	External type 2 routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/	<ospf><metric>{unit32}</metric></ospf>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/	<ospf><route-map>ipv6-restapi</route-map></ospf>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf	<ospf><metric-type>external</metric-type></ospf>	IS-IS metric type for redistributed routes.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/	<static><metric>{unit32}</metric></static>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static	<route-map>route-map-static</route-map>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric-type	<static><metric-type>external</metric-type></static>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp	<bgp><metric>{unit32}</metric></bgp>	Metric for redistributed routes
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp	<bgp><route-map>ipv6-restapi</route-map></bgp>	Route map reference
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp	<bgp><metric-type>external</metric-type></bgp>	IS-IS metric type for redistributed routes.
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/level-1	<level-1>{enumeration}</level-1>	IS-IS Level-1 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/level-2	<level-2>{enumeration}</level-2>	IS-IS Level-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/level-1-2	<level-1-2>{enumeration}</level-1-2>	IS-IS Level-1-2 routes only
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/level-1	<level-1><prefix-list>{string}</prefix-list></level-1>	Selects routes using prefix-list.

DELETE URIs
<base_URI>/config/running/router/isis
<base_URI>/config/running/router/isis/net/{net-cmd}
<base_URI>/config/running/router/isis/auth-mode/md5/level-1
<base_URI>/config/running/router/isis/auth-mode/md5/level-2



DELETE URIs
<base_URI>/config/running/router/isis/csnp-interval
<base_URI>/config/running/router/isis/disable-incremental-spf-opt
<base_URI>/config/running/router/isis/disable-inc-stct-spf-opt
<base_URI>/config/running/router/isis/disable-partial-spf-opt
<base_URI>/config/running/router/isis/fast-flood
<base_URI>/config/running/router/isis/fast-flood/fast-flood-value
<base_URI>/config/running/router/isis/graceful-restart/helper-disable
<base_URI>/config/running/router/isis/hostname/disable
<base_URI>/config/running/router/isis/isis-type
<base_URI>/config/running/router/isis/log/adjacency
<base_URI>/config/running/router/isis/log/invalid-lsp-packets
<base_URI>/config/running/router/isis/lsp-gen-interval
<base_URI>/config/running/router/isis/lsp-interval
<base_URI>/config/running/router/isis/lsp-refresh-interval
<base_URI>/config/running/router/isis/max-lsp-lifetime
<base_URI>/config/running/router/isis/nonstop-routing
<base_URI>/config/running/router/isis/partial-spf-interval
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-max-hold-time
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-init-delay
<base_URI>/config/running/router/isis/partial-spf-interval/pspf-hold-time
<base_URI>/config/running/router/isis/retransmit-interval
<base_URI>/config/running/router/isis/set-debug/nsr
<base_URI>/config/running/router/isis/set-overload-bit
<base_URI>/config/running/router/isis/set-overload-bit/on-startup
<base_URI>/config/running/router/isis/spf-interval/level-1
<base_URI>/config/running/router/isis/reverse-metric
<base_URI>/config/running/router/isis/reverse-metric/tlv-type
<base_URI>/config/running/router/isis/reverse-metric/rev-metric-val
<base_URI>/config/running/router/isis/reverse-metric/whole-lan
<base_URI>/config/running/router/isis/reverse-metric/te-def-metric
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide/level-2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/ldp-sync/hold-down
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric/level-1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-link-metric/level-2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/route-map
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-information-originate/default-information-originate-cr
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/default-metric
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/distance
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/maximum-paths
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected

DELETE URIs
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/route-map
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/connected/metric-type
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/internal
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/match/external2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/route-map
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf/metric-type
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/route-map
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/static/metric-type
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/metric
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/route-map
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp/metric-type
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1/into
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-1/into/level-2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1
<base_URI>/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis/level-2/into/level-1/prefix-list
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/summary-prefix/{summary-prefix-ipv6}/level-2
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric/level-1
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-link-metric/level-2
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/multi-topology/transition
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/spf-interval/level-1
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-max-hold-time
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-init-delay
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/partial-spf-interval/pspf-hold-time
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate/route-map
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-information-originate/default-information-originate-cr
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/default-metric
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/distance

DELETE URIs
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/maximum-paths
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/route-map
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/connected/metric-type
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/internal
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external1
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/match/external2
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/route-map
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf/metric-type
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/route-map
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/static/metric-type
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/metric
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/route-map
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp/metric-type
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-1
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-1/into
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-1/into/level-2
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/level-1
<base_URI>/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis/level-2/into/level-1/prefix-list

## 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/router/isis

### Request Body

None

### Response Body

```
isis xmlns="urn:brocade.com:mgmt:brocade-isis" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/router/isis">
  <net y:self="/rest/config/running/router/isis/net/01.1111.1111.1111.00">
    <net-cmd>01.1111.1111.1111.00</net-cmd>
  </net>
  <auth-check y:self="/rest/config/running/router/isis/auth-check">
    <level-1 y:self="/rest/config/running/router/isis/auth-check/level-1">
      </level-1>
    <level-2 y:self="/rest/config/running/router/isis/auth-check/level-2">
      </level-2>
    </auth-check>
  <auth-mode y:self="/rest/config/running/router/isis/auth-mode">
    <md5 y:self="/rest/config/running/router/isis/auth-mode/md5">
      </md5>
    </auth-mode>
  <auth-key y:self="/rest/config/running/router/isis/auth-key">
    </auth-key>
  <fast-flood y:self="/rest/config/running/router/isis/fast-flood">
    <fast-flood-value>10</fast-flood-value>
  </fast-flood>
  <graceful-restart y:self="/rest/config/running/router/isis/graceful-restart">
    </graceful-restart>
  <hello y:self="/rest/config/running/router/isis/hello">
    <padding y:self="/rest/config/running/router/isis/hello/padding">
      <point-to-point y:self="/rest/config/running/router/isis/hello/padding/point-to-point">
        </point-to-point>
      </padding>
    </hello>
  <hostname y:self="/rest/config/running/router/isis/hostname">
    </hostname>
  <is-type>level-2</is-type>
  <log y:self="/rest/config/running/router/isis/log">
    <adjacency>true</adjacency>
    <invalid-lsp-packets>true</invalid-lsp-packets>
  </log>
  <nonstop-routing>true</nonstop-routing>
  <partial-spf-interval y:self="/rest/config/running/router/isis/partial-spf-interval">
    </partial-spf-interval>
  <set-debug y:self="/rest/config/running/router/isis/set-debug">
    <nsr>true</nsr>
  </set-debug>
  <address-family y:self="/rest/config/running/router/isis/address-family">
    <ipv4 y:self="/rest/config/running/router/isis/address-family/ipv4">
      <unicast y:self="/rest/config/running/router/isis/address-family/ipv4/unicast">
        <metric-style y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/metric-
style">
          <wide y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/metric-style/wide">
            <level-1>true</level-1>
            <level-2>true</level-2>
          </wide>
        </metric-style>
      </unicast>
    </ipv4>
  </address-family>
</isis>
```

```

    <default-link-metric y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/
default-link-metric">
    </default-link-metric>
    <default-information-originate y:self="/rest/config/running/router/isis/address-family/ipv4/
unicast/default-information-originate">
    <route-map>restapi</route-map>
    <default-information-originate-cr>true</default-information-originate-cr>
    </default-information-originate>
    <default-metric>5000</default-metric>
    <distance>110</distance>
    <redistribute y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/
redistribute">
    <connected y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
connected">
    <metric>3000</metric>
    <route-map>rm-connected</route-map>
    <level-1-2>true</level-1-2>
    </connected>
    <ospf y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/ospf">
    <match y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
ospf/match">
    <internal>true</internal>
    </match>
    <metric>2000</metric>
    <route-map>rm-ospf</route-map>
    <level-1-2>true</level-1-2>
    </ospf>
    <static y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
static">
    <metric>4000</metric>
    <route-map>rm-static</route-map>
    <level-1-2>true</level-1-2>
    </static>
    <bgp y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/bgp">
    <metric>1000</metric>
    <route-map>rm-bgp</route-map>
    <level-1-2>true</level-1-2>
    </bgp>
    <isis y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/isis">
    <level-1 y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
isis/level-1">
    <into y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
isis/level-1/into">
    <level-2 y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/
redistribute/isis/level-1/into/level-2">
    </level-2>
    </into>
    </level-1>
    <level-2 y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
isis/level-2">
    <into y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/redistribute/
isis/level-2/into">
    <level-1 y:self="/rest/config/running/router/isis/address-family/ipv4/unicast/
redistribute/isis/level-2/into/level-1">
    </level-1>
    </into>
    </level-2>
    </isis>
    </redistribute>
    </unicast>
  </ipv4>
  <ipv6 y:self="/rest/config/running/router/isis/address-family/ipv6">
    <unicast y:self="/rest/config/running/router/isis/address-family/ipv6/unicast">
    <disable-adjacency-check>true</disable-adjacency-check>
    <summary-prefix y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/summary-
prefix/%22100:100:100::0/64%22">
    <summary-prefix-ipv6>100:100:100::0/64</summary-prefix-ipv6>
    </summary-prefix>
    <summary-prefix y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/summary-
prefix/%2280:80:80::0/64%22">
    <summary-prefix-ipv6>80:80:80::0/64</summary-prefix-ipv6>
    </summary-prefix>

```

```

    <summary-prefix y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/summary-
prefix/%2290:90:90::0/64%22">
      <summary-prefix-ipv6>90:90:90::0/64</summary-prefix-ipv6>
    </summary-prefix>
    <default-link-metric y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/
default-link-metric">
      <level-1>500</level-1>
      <level-2>1100</level-2>
    </default-link-metric>
    <partial-spf-interval y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/
partial-spf-interval">
    </partial-spf-interval>
    <default-information-originate y:self="/rest/config/running/router/isis/address-family/ipv6/
unicast/default-information-originate">
      <route-map>ipv6-restapi</route-map>
      <default-information-originate-cr>true</default-information-originate-cr>
    </default-information-originate>
    <default-metric>60535</default-metric>
    <distance>100</distance>
    <maximum-paths>64</maximum-paths>
    <redistribute y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/
redistribute">
      <connected y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
connected">
        <metric>3500</metric>
        <route-map>rm-connectedv6</route-map>
        <level-1-2>true</level-1-2>
      </connected>
      <ospf y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/ospf">
        <match y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
ospf/match">
          </match>
          <metric>2500</metric>
          <route-map>rm-ospfv6</route-map>
          <level-1-2>true</level-1-2>
        </ospf>
      <static y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
static">
        <metric>4500</metric>
        <route-map>rm-staticv6</route-map>
        <level-1-2>true</level-1-2>
      </static>
      <bgp y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/bgp">
        <metric>1500</metric>
        <route-map>rm-bgpv6</route-map>
        <level-1-2>true</level-1-2>
      </bgp>
      <isis y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/isis">
        <level-1 y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
isis/level-1">
          <into y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
isis/level-1/into">
            <level-2 y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/
redistribute/isis/level-1/into/level-2">
              </level-2>
            </into>
          </level-1>
          <level-2 y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
isis/level-2">
            <into y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/redistribute/
isis/level-2/into">
              <level-1 y:self="/rest/config/running/router/isis/address-family/ipv6/unicast/
redistribute/isis/level-2/into/level-1">
                </level-1>
              </into>
            </level-2>
          </isis>
        </redistribute>
      </unicast>
    </ipv6>
  </address-family>
</isis>

```

The following is an example of the POST operation to configure an IS-IS network entity title (NET) for the routing process.

### *URI*

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

### *Request Body*

```
<net><net-cmd>01.1111.1111.1111.00</net-cmd></net>
```

### *Response Body*

None

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

### *URI*

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

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.1.00	This API call was introduced.

# router/mpls

Configures and manages the MPLS protocol.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls	MPLS Protocol

Following are the supported URIs.

### NOTE

There are separate sections for other MPLS APIs which are not covered in this topic.

GET URIs	Description
<BASE_URI>/config/running/router/mpls	MPLS Protocol
<BASE_URI>/config/running/router/mpls/lsp-xc-traps/enable	Enable the LSP XC up/down logging/traps
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}/penalty	Configure cspf group penalty value

POST URIs	Payload	Description
<BASE_URI>/config/running/router	<mpls />	MPLS Protocol
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<from><cspf-group-ip-address>{req_val}</cspf-group-ip-address></from>	Configure cspf group from ip address
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<link><cspf-group-link-from>{req_val}</cspf-group-link-from><to>{req_val}</to></link>	Configure cspf group from and to ip address
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<subnet><cspf-group-subnet-ip>{req_val}</cspf-group-subnet-ip></subnet>	Configure cspf group subnet address
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<node><cspf-group-node-ip>{req_val}</cspf-group-node-ip></node>	Configure cspf group node ip address
<BASE_URI>/config/running/router/mpls	<path><path-name>{req_val}</path-name></path>	Defines a path
<BASE_URI>/config/running/router/mpls/path/{path-name}	<hop><path-hop-ip>{req_val}</path-hop-ip><path-hop-type>{strict-loose-hop}</path-hop-type></hop>	Configures path strict or loose hops
<BASE_URI>/config/running/router/mpls/path/{path-name}	<insert><path-insert-ip>{req_val}</path-insert-ip><path-insert-type>{strict-loose-hop}</path-insert-type><before>[inet:ipv4-address]</before></insert>	Insert path strict or loose hops

PATCH URIs	Payload	Description
<BASE_URI>/config/running/router/mpls/lsp-xc-traps/enable	<enable />	Enable the LSP XC up/down logging/traps
<BASE_URI>/config/running/router/mpls/cspf-group	<absolute>{uint32}</absolute>	Configure Max reservable bandwidth as absolute value
<BASE_URI>/config/running/router/mpls/cspf-group	<percentage>{uint32}</percentage>	Configure Max reservable bandwidth as percentage



PATCH URIs	Payload	Description
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}	<cspf-group><penalty>{uint32}</penalty></cspf-group>	Define a CSPF group penalty and configure cspf group penalty value
<BASE_URI>/config/running/router/mpls/path/{path-name}/hop/{path-hop-ip}	<hop><path-hop-type>{strict-loose-hop}</path-hop-type></hop>	Configure path strict or loose hops
<BASE_URI>/config/running/router/mpls/path/{path-name}/insert/{path-insert-ip}	<insert><path-insert-type>{strict-loose-hop}</path-insert-type><before>[inet:ipv4-address]</before></insert>	Insert path strict or loose hops

PUT URIs	Payload	Description
<BASE_URI>/config/running/router/mpls/lsp-xc-traps/enable	<enable />	Enable the LSP XC up/down logging/traps
<BASE_URI>/config/running/router/mpls/cspf-group	<absolute>{uint32}</absolute>	Configure cspf-group
<BASE_URI>/config/running/router/mpls/cspf-group	<percentage>{uint32}</percentage>	Bandwidth percentage when bandwidth is decreased or increased
<BASE_URI>/config/running/router/mpls/cspf-group/{cspf-group-name}/penalty	<penalty>{uint32}</penalty>	Configure cspf group penalty 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 CSPF group configuration details.

### URI

http://host:80/rest/config/running/router/mpls/cspf-group

### Request Body

None

### Response Body

```
<cspf-group xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/mpls/cspf-group/cspf1">
  <cspf-group-name>cspf1</cspf-group-name>
</cspf-group>
```

The following example uses the PATCH option to set the penalty value to 22.

### *URI*

http://host:80/rest/config/running/router/mpls/cspf-group/cspf1

### *Request Body*

```
<cspf-group><penalty>22</penalty></cspf-group>
```

### *Response Body*

None

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

### *URI*

http://host:80/rest/config/running/router/mpls/cspf-group/cspf1/penalty

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.1.00	This API call was introduced.

# router/mpls/autobw-template

Configures, retrieves and modifies an autobandwidth template.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls/autobw-template	Configures, retrieves and modifies an autobandwidth template.

GET URIs	Description
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/adjustment-interval	Displays the time interval after which the LSP bandwidth should be adjusted.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/adjustment-threshold	Displays the adjustment threshold.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/min-bandwidth	Displays the minimum bandwidth value in kbps.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/max-bandwidth	Displays the maximum bandwidth value in kbps.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/overflow-limit	Displays the overflow limit.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/underflow-limit	Displays the underflow limit.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/mode	Displays mode value. Allowed values: monitor-only or monitor-and-signal
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/sample-recording	Displays whether sample recording is enabled or disabled.

POST URIs	Payload	Description
<base_URI>/config/running/router/mpls	<autobw-template><autobw-template-name>{string}</autobw-template-name></autobw-template>	Configures an Auto-bandwidth template

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}	<autobw-template><adjustment-interval>{uint32}</adjustment-interval></autobw-template>	Configures the time interval after which the LSP bandwidth should be adjusted.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/adjustment-threshold	<adjustment-threshold><threshold-percentage>{uint32}</threshold-percentage></adjustment-threshold>	Configures the adjustment threshold.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/adjustment-threshold	<adjustment-threshold><use-threshold-table>true</use-threshold-table></adjustment-threshold>	Sets the status of use-threshold-table to true.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}	<autobw-template><min-bandwidth>{uint32}</min-bandwidth></autobw-template>	Configures the minimum bandwidth value in kbps.
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}	<autobw-template><max-bandwidth>{uint32}</max-bandwidth></autobw-template>	Configures the maximum bandwidth value in kbps.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}	<autobw-template><overflow-limit>{uint32}</overflow-limit></autobw-template>	Sets the overflow limit.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}	<autobw-template><underflow-limit>{uint32}</underflow-limit></autobw-template>	Sets the underflow limit.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}	<autobw-template><mode>{autobw-mode}</mode></autobw-template>	Sets mode value. Allowed values: monitor-only or monitor-and-signal
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}	<autobw-template><sample-recording>{enable-disable}</sample-recording></autobw-template>	Enables or disables sample recording.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/adjustment-interval	<adjustment-interval>{uint32}</adjustment-interval>	Configures the time interval after which the LSP bandwidth should be adjusted.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/adjustment-threshold/threshold-percentage	<threshold-percentage>{uint32}</threshold-percentage>	Configures the adjustment threshold.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/adjustment-threshold/use-threshold-table	<use-threshold-table>true</use-threshold-table>	Sets the status of use-threshold-table to true.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/max-bandwidth	<max-bandwidth>{uint32}</max-bandwidth>	Configures the maximum bandwidth value in kbps.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/min-bandwidth	<min-bandwidth>{uint32}</min-bandwidth>	Configures the minimum bandwidth value in kbps.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/mode	<mode>{autobw-mode}</mode>	Sets mode value. Allowed values: monitor-only or monitor-and-signal .
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/overflow-limit	<overflow-limit>{uint32}</overflow-limit>	Sets the overflow limit.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/sample-recording	<sample-recording>{enable-disable}</sample-recording>	Enables or disables sample recording.
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/underflow-limit	<underflow-limit>{uint32}</underflow-limit>	Sets the underflow limit.

DELETE URIs
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/adjustment-interval
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/adjustment-threshold
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/max-bandwidth
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/min-bandwidth
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/mode
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/overflow-limit
<base_URI>/config/running/router/mppls/autobw-template/{autobw-template-name}/sample-recording

## DELETE URIs

```
<base_URI>/config/running/router/mpls/autobw-template/{autobw-template-name}/underflow-limit
```

## Parameters

### *adjustment-interval*

Time interval after which the LSP bandwidth should be adjusted. Range: 300 - 2592000(30 days) seconds. Default: 86400 sec (1 day).

### *adjustment-threshold*

Bandwidth will be adjusted only if percentage difference of Max-Sample-bandwidth w.r.t current bandwidth is greater than this value. Range 0-100%. Default 0%

### *max-bandwidth*

The LSP bandwidth can never be greater than this value. In case the traffic-eng max-rate is configured, max-bandwidth cannot be configured to be greater than the traffic-eng max-rate. Range 0 - 2147483647 kbps. Default 2147483647 kbps.

### *min-bandwidth*

The LSP bandwidth can never be lower than this value. Range 0 - 2147483647 kbps. Default 0 kbps.

### *mode*

Allowed values: monitor-only or monitor-and-signal. If the mode is set to monitor-only, the adjustment of bandwidth will be disabled and only the rate info will be collected. Default: monitor-and-signal

### *overflow-limit*

The least number of times the sampled-BW should consecutively overflow adjustment-threshold to trigger premature adjustment. Range: 0 - 65535. Default: 0 (never adjust for limit overflow).

### *underflow-limit*

Sets the number of samples that must be below the threshold to trigger a premature adjustment for primary path. Range: 0 - 65535. Default: 0 (meaning there is no premature adjustment because of underflow).

## Usage Guidelines

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

## Examples

The following example uses the GET option to display the details of auto-bandwidth template "aaa".

### URI

http://host:80/rest/config/running/router/mps/autobw-template/aaa

### Request Body

None

### Response Body

```
<autobw-template xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/mps/autobw-template/aaa">
  <autobw-template-name>aaa</autobw-template-name>
  <adjustment-interval>1800</adjustment-interval>
  <adjustment-threshold y:self="/rest/config/running/router/mps/autobw-template/aaa/adjustment-
threshold">
    </adjustment-threshold>
  <min-bandwidth>5000</min-bandwidth>
</autobw-template>
```

The following example uses the POST option to create an auto-bandwidth template called "aaa".

### URI

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

### Request Body

```
<autobw-template><autobw-template-name>aaa</autobw-template-name></autobw-template>
```

### Response Body

None

The following example uses the DELETE option to remove auto-bandwidth template "aaa".

### URI

http://host:80/rest/config/running/router/mps/autobw-template/aaa

### Request Body

None

### Response Body

None

## History

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

# router/mppls/autobw-threshold-table

Configures, modifies and retrieves the autobandwidth threshold table.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mppls/autobw-threshold-table	Configures, modifies and retrieves the autobandwidth threshold table.

GET URIs	Description
<base_URI>/config/running/router/mppls/autobw-threshold-table	Retrieves the autobandwidth threshold table.
<base_URI>/config/running/router/mppls/autobw-threshold-table/ bandwidth/{bandwidth-value}	Displays the threshold change point for a bandwidth value in kbps.
<base_URI>/config/running/router/mppls/autobw-threshold-table/ max-bw-threshold	Displays the maximum threshold value.

POST URIs	Payload	Description
<base_URI>/config/running/router/mppls	<autobw-threshold-table />	Configures an autobandwidth threshold table.
<bandwidth><bandwidth-value>{uint32}</ bandwidth-value><threshold>{uint32}</ threshold></bandwidth>	<base_URI>/config/running/router/mppls/ autobw-threshold-table	Adds a new threshold change point to the autobw -threshold table. If the change point is already there, the value of threshold will be updated.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/ autobw-threshold-table/bandwidth/ {bandwidth-value}	<bandwidth><threshold>{uint32}</ threshold></bandwidth>	Modifies a threshold change point
<base_URI>/config/running/router/mppls/ autobw-threshold-table/max-bw-threshold	<max-bw-threshold><absolute>{uint32}</ absolute></max-bw-threshold>	Sets absolute threshold in kbps for any traffic rate above the max ceiling.
<base_URI>/config/running/router/mppls/ autobw-threshold-table/max-bw-threshold	<max-bw-threshold><percentage>{uint32}</ percentage></max-bw-threshold>	This command will set the percentage threshold for any traffic-rate above the max bandwidth.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mppls/ autobw-threshold-table	<autobw-threshold-table />	Configures an autobandwidth threshold table
<base_URI>/config/running/router/mppls/ autobw-threshold-table/max-bw-threshold/ absolute	<absolute>{uint32}</absolute>	Sets absolute threshold in kbps
<base_URI>/config/running/router/mppls/ autobw-threshold-table/max-bw-threshold/ percentage	<percentage>{uint32}</percentage>	Sets threshold percentage.

DELETE URIs
<base_URI>/config/running/router/mppls/autobw-threshold-table
<base_URI>/config/running/router/mppls/autobw-threshold-table/bandwidth/{bandwidth-value}



## Parameters

### *absolute*

The absolute threshold based on the current traffic rate. Range 0-2147483647 kbps.

### *percentage*

The threshold based on a percentage of the current traffic rate. Range 0-100%.

## Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve the threshold table parameters.

### *URI*

http://host:80/rest/config/running/router/mpls/autobw-threshold-table

### *Request Body*

None

### *Response Body*

```
<autobw-threshold-table xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/router/mpls/autobw-threshold-table">
  <bandwidth y:self="/rest/config/running/router/mpls/autobw-threshold-table/bandwidth/1000">
    <bandwidth-value>1000</bandwidth-value>
  </bandwidth>
  <max-bw-threshold y:self="/rest/config/running/router/mpls/autobw-threshold-table/max-bw-threshold">
    </max-bw-threshold>
</autobw-threshold-table>
```

The following example uses the POST option to configure the threshold table with a bandwidth value of 1000 and a threshold value of 99.

### *URI*

http://host:80/rest/config/running/router/mpls/autobw-threshold-table

### *Request Body*

```
<bandwidth><bandwidth-value>1000</bandwidth-value><threshold>99</threshold></bandwidth>
```

### *Response Body*

None

The following example uses the DELETE option.

### *URI*

http://host:80/rest/config/running/router/mpls/autobw-threshold-table

### *Request Body*

None

### *Response Body*

None

## History

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

# router/mpls/bypass-lsp

Configures, modifies or retrieves MPLS Bypass LSP information.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls/bypass-lsp	Configures, modifies or retrieves MPLS Bypass LSP information.

GET URIs	Descriptions
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}	Configures, modifies or retrieves MPLS Bypass LSP information.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/to	Retrieves LSP destination address.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/from	Retrieves LSP source address.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/tie-breaking	Retrieves the tie breaking mode configuration.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/adaptive	Retrieves LSP adaptive configuration.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/reoptimize-timer	Retrieves Reoptimization timer configuration.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/commit	Retrieves changes to adaptive LSP configuration.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/record	Retrieves the recording path routes configuration.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/cos	Retrieves class of service.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/hop-limit	Displays the limit of hops the LSP can traverse.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/cspf-computation-mode	Displays cspf-computation-mode.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering	Displays traffic engineering details.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/mean-rate	Retrieves the mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-rate	Retrieves the max-rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-burst	Retrieves the max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/priority	Displays priority
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/priority/lsp-hold-priority	Displays LSP-hold priority. Range is 0 to 7. Default is 0.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/exclude-any	Exclude any of the administrative groups.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/include-any	Include any of the administrative groups

GET URIs	Descriptions
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/include-all	Include all of the administrative groups
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/exclude-interface/{bypass-exclude-interface-type},{bypass-exclude-interface-name}	Displays exclude-interface status (true / false).
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/primary-path	Displays primary explicit path.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/enable	Enables a bypass lsp.

POST URIs	Payload	Description
<base_URI>/config/running/router/mppls	<bypass-lsp><bypass-lsp-name>[string]</bypass-lsp-name></bypass-lsp>	Creates bypass LSP configuration.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<exclude-interface><bypass-exclude-interface-type>{mpls-interface-type}</bypass-exclude-interface-type><bypass-exclude-interface-name>{interface-type}</bypass-exclude-interface-name></exclude-interface>	Configures a bypass LSP.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><to>{inet.ipv4-address}</to></bypass-lsp>	Configures LSP destination address.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><from>{inet.ipv4-address}</from></bypass-lsp>	Configures LSP source address.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><tie-breaking>{tie-breaking}</tie-breaking></bypass-lsp>	Configures the tie breaking mode.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><adaptive>true</adaptive></bypass-lsp>	Modifies the LSP adaptive configuration.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><reoptimize-timer>{uint32}</reoptimize-timer></bypass-lsp>	Modifies eeoptimization timer configuration.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><commit>true</commit></bypass-lsp>	Commit the changes to adaptive LSP.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><record>{enable-disable}</record></bypass-lsp>	Enables/disables recording path routes.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><cos>{uint32}</cos></bypass-lsp>	Updates class of service.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><hop-limit>{uint16}</hop-limit></bypass-lsp>	Updates the limit of hops which the LSP can traverse.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode></bypass-lsp>	Updates cspf-computation-mode.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/traffic-engineering	<traffic-engineering><mean-rate>{uint32}</mean-rate></traffic-engineering>	Updates mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/traffic-engineering	<traffic-engineering><max-rate>{uint32}</max-rate></traffic-engineering>	Updates max rate in kbps. Range is 0-2147483647.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/traffic-engineering	<traffic-engineering><max-burst>{uint32}</max-burst></traffic-engineering>	Updates Max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/priority	<priority><lsp-setup-priority>{uint32}</lsp-setup-priority><lsp-hold-priority>{uint32}</lsp-hold-priority></priority>	Updates the lsp setup priority to include all of the administrative groups.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><exclude-any>{string}</exclude-any></bypass-lsp>	Excludes any of the administrative groups.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><include-any>{string}</include-any></bypass-lsp>	Includes any of the administrative groups
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><include-all>{string}</include-all></bypass-lsp>	Includes all of the administrative groups
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><primary-path>{string}</primary-path></bypass-lsp>	Updates a primary explicit path.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}	<bypass-lsp><enable>true</enable></bypass-lsp>	Enables a bypass LSP.

PUT URIs	PAYLOAD	Descriptions
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/to	<to>{inet:ipv4-address}</to>	Configures bypass LSP destination address.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/from	<from>{inet:ipv4-address}</from>	Configures bypass LSP source address.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/tie-breaking	<tie-breaking>{tie-breaking}</tie-breaking>	Updates the tie breaking mode.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/adaptive	<adaptive>true</adaptive>	Configures bypass LSP adaptive configuration.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/reoptimize-timer	<reoptimize-timer>{uint32}</reoptimize-timer>	Configures reoptimization timer.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/commit	<commit>true</commit>	Commit the changes to adaptive LSP.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/record	<record>{enable-disable}</record>	Enable/disable recording path routes.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/cos	<cos>{uint32}</cos>	Configure class of service.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/hop-limit	<hop-limit>{uint16}</hop-limit>	Configures limit of hops the LSP can traverse.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/cspf-computation-mode	<cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode>	Specify cspf-computation-mode.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/mean-rate	<mean-rate>{uint32}</mean-rate>	Sets Mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-rate	<max-rate>{uint32}</max-rate>	Sets Max-rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-burst	<max-burst>{uint32}</max-burst>	Sets Max-burst-rate in kbps. Range is 0-2147483647.

PUT URIs	PAYLOAD	Descriptions
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/priority/lsp-hold-priority	<priority><lsp-setup-priority>{uint32}</lsp-setup-priority><lsp-hold-priority>{uint32}</lsp-hold-priority></priority>	Sets lsp hold priority.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/exclude-any	<exclude-any>{string}</exclude-any>	Excludes any of the administrative groups.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/include-any	<include-any>{string}</include-any>	Includes any of the administrative groups
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/include-all	<include-all>{string}</include-all>	Includes all of the administrative groups
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/primary-path	<primary-path>{string}</primary-path>	Updates a primary explicit path.
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/enable	<enable>true</enable>	Enables a bypass LSP.

DELETE URIs
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/to
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/from
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/tie-breaking
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/adaptive
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/reoptimize-timer
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/record
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/cos
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/hop-limit
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/cspf-computation-mode
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/mean-rate
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-rate
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/traffic-engineering/max-burst
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/priority/lsp-hold-priority
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/exclude-any
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/include-any
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/include-all
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/exclude-interface/{bypass-exclude-interface-type},{bypass-exclude-interface-name}
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/primary-path
<base_URI>/config/running/router/mpls/bypass-lsp/{bypass-lsp-name}/enable

## Parameters

### *max-bypasses*

Maximum number of dynamic bypass LSPs that can be created for this MPLS interface.

### *max-bypasses-per-mp*

The limit for total number of dynamic bypass LSPs that can be created to a merge point.

*enable-all-interfaces*

Enable a dynamic bypass on all MPLS interfaces.

*reoptimize-timer*

Reoptimization timer value in seconds for the dynamic bypass LSPs. Range 30 - 65535 seconds. The default is 0, which means re-optimization is disabled.

## 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/router/mpls/bypass-lsp/bypass1

### Request Body

None

### Response Body

```
<bypass-lsp xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/mpls/bypass-lsp/bypass1">
  <bypass-lsp-name>bypass1</bypass-lsp-name>
  <traffic-engineering y:self="/rest/config/running/router/mpls/bypass-lsp/bypass1/traffic-engineering">
  </traffic-engineering>
  <priority y:self="/rest/config/running/router/mpls/bypass-lsp/bypass1/priority">
  </priority>
</bypass-lsp>
```

The following example uses the POST option to configure a bypass LSP, "bypass1".

### URI

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

### Request Body

```
<bypass-lsp><bypass-lsp-name>bypass1</bypass-lsp-name></bypass-lsp>
```

### Response Body

None.

The following example uses the DELETE option to remove a configured bypass LSP, "bypass1".

### *URI*

http://host:80/rest/config/running/router/mpls/bypass-lsp/bypass1

### *Request Body*

None

### *Response Body*

None

## History

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



# router/mpls/dynamic-bypass

Configures, modifies or retrieves MPLS Dynamic Bypass LSP information.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls/dynamic-bypass	Configures, modifies or retrieves MPLS Dynamic Bypass LSP information.

GET URIs	Description
<base_URI>/config/running/router/mpls/dynamic-bypass	Displays MPLS Dynamic Bypass LSP information.
<base_URI>/config/running/router/mpls/dynamic-bypass/max-bypasses	Displays maximum number of dynamic bypass LSPs that can be created for this MPLS interface.
<base_URI>/config/running/router/mpls/dynamic-bypass/max-bypasses-per-mp	Displays the limit for total number of dynamic bypass LSPs that can be created to a merge point.
<base_URI>/config/running/router/mpls/dynamic-bypass/enable-all-interfaces	Returns true if dynamic bypass on all MPLS interfaces is enabled.
<base_URI>/config/running/router/mpls/dynamic-bypass/reoptimize-timer	Displays re-optimization value.
<base_URI>/config/running/router/mpls/dynamic-bypass/disable	Returns true if Disable dynamic bypass is set.

POST URIs	Payload	Description
<base_URI>/config/running/router/mpls	<dynamic-bypass />	Configures Displays MPLS Dynamic Bypass LSP.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/dynamic-bypass	<dynamic-bypass><max-bypasses>{uint32}</max-bypasses></dynamic-bypass>	Sets maximum number of dynamic bypass LSPs that can be created for this MPLS interface.
<base_URI>/config/running/router/mpls/dynamic-bypass	<dynamic-bypass><max-bypasses-per-mp>{uint32}</max-bypasses-per-mp></dynamic-bypass>	Sets the limit for total number of dynamic bypass LSPs that can be created to a merge point.
<base_URI>/config/running/router/mpls/dynamic-bypass	<dynamic-bypass><enable-all-interfaces>true</enable-all-interfaces></dynamic-bypass>	Enables dynamic bypass on all MPLS interfaces.
<base_URI>/config/running/router/mpls/dynamic-bypass	<dynamic-bypass><reoptimize-timer>{uint32}</reoptimize-timer></dynamic-bypass>	Sets re-optimization value.
<base_URI>/config/running/router/mpls/dynamic-bypass	<dynamic-bypass><disable>true</disable></dynamic-bypass>	Disables dynamic bypass.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/dynamic-bypass	<dynamic-bypass />	Configures Displays MPLS Dynamic Bypass LSP.
<base_URI>/config/running/router/mpls/dynamic-bypass/max-bypasses	<max-bypasses>{uint32}</max-bypasses>	Sets maximum number of dynamic bypass LSPs that can be created for this MPLS interface.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/dynamic-bypass/max-bypasses-per-mp	<max-bypasses-per-mp>{uint32}</max-bypasses-per-mp>	Sets the limit for total number of dynamic bypass LSPs that can be created to a merge point.
<base_URI>/config/running/router/mpls/dynamic-bypass/enable-all-interfaces	<enable-all-interfaces>true</enable-all-interfaces>	Enables dynamic bypass on all MPLS interfaces.
<base_URI>/config/running/router/mpls/dynamic-bypass/reoptimize-timer	<reoptimize-timer>{uint32}</reoptimize-timer>	Sets re-optimization value.
<base_URI>/config/running/router/mpls/dynamic-bypass/disable	<disable>true</disable>	Disables dynamic bypass.

DELETE URIs
<base_URI>/config/running/router/mpls/dynamic-bypass
<base_URI>/config/running/router/mpls/dynamic-bypass/max-bypasses-per-mp
<base_URI>/config/running/router/mpls/dynamic-bypass/enable-all-interfaces
<base_URI>/config/running/router/mpls/dynamic-bypass/reoptimize-timer
<base_URI>/config/running/router/mpls/dynamic-bypass/disable

## Parameters

### *max-bypasses*

Maximum number of dynamic bypass LSPs that can be created for this MPLS interface.

### *max-bypasses-per-mp*

The limit for total number of dynamic bypass LSPs that can be created to a merge point.

### *enable-all-interfaces*

Enable a dynamic bypass on all MPLS interfaces.

### *reoptimize-timer*

Reoptimization timer value in seconds for the dynamic bypass LSPs. Range 30 - 65535 seconds. The default is 0, which means re-optimization is disabled.

## 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/router/mpls/dynamic-bypass

### Request Body

None

### Response Body

```
<dynamic-bypass xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/
rest/config/running/router/mpls/dynamic-bypass">
  <max-bypasses>500</max-bypasses>
  <max-bypasses-per-mp>500</max-bypasses-per-mp>
  <enable-all-interfaces>true</enable-all-interfaces>
  <reoptimize-timer>301</reoptimize-timer>
</dynamic-bypass>
```

The following example uses the PATCH option to enable all interfaces for dynamic bypass.

### URI

http://host:80/rest/config/running/router/mpls/dynamic-bypass

### Request Body

```
<dynamic-bypass><enable-all-interfaces>true</enable-all-interfaces></dynamic-bypass>
```

### Response Body

None.

The following example uses the DELETE option to delete maximum bypasses per mp.

### URI

http://host:80/rest/config/running/router/mpls/dynamic-bypass/max-bypasses-per-mp

### Request Body

None

### Response Body

None

## History

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

# router/mpls/ldp

Configures MPLS LDP.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls/ldp	Configures MPLS LDP.

Following are the supported URIs.

GET URIs	Description
<base_URI>/config/running/router/mpls/ldp	Configures MPLS LDP.
<base_URI>/config/running/router/mpls/ldp/load-sharing	Number of load-sharing paths.
<base_URI>/config/running/router/mpls/ldp/hello-interval-link	Global link hello interval.
<base_URI>/config/running/router/mpls/ldp/hello-interval-target	Target interval in seconds. Range is 1-32767. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-link	IDP time out in seconds. Range is 2-65535. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-target	IDP target time out in seconds. Range is 2-65535. Default is 45.
<base_URI>/config/running/router/mpls/ldp/ka-interval	Keep alive interval.
<base_URI>/config/running/router/mpls/ldp/ka-int-count	Ka Interval in seconds. Range is 1-65535. Default is 6.
<base_URI>/config/running/router/mpls/ldp/ka-timeout	Keep alive timeout.
<base_URI>/config/running/router/mpls/ldp/filter-fec-in	Apply filtering on inbound FECs.
<base_URI>/config/running/router/mpls/ldp/filter-fec-out	Apply filtering on inbound FECs.
<base_URI>/config/running/router/mpls/ldp/advertise-fec	Prefix-list specifying controls on destination prefixes.
<base_URI>/config/running/router/mpls/ldp/fec-128-for-auto-discovered	Use LDP FEC 128 for auto-discovered VPLS peers.
<base_URI>/config/running/router/mpls/ldp/lsr-id	LDP LSR ID.
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}/filter-fec-out	Apply filtering on outbound FECs.
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}/key	Enable TCP-MD5 authentication.
<base_URI>/config/running/router/mpls/ldp/rx-label-silence-timer	Receive label silence time.
<base_URI>/config/running/router/mpls/ldp/graceful-restart	Enter MPLS LDP GR Config mode.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/helper-only	Helper only mode.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/max-neighbor-reconnect-time	Maximum time to wait for neighbor to reconnect.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/max-neighbor-recovery-time	Maximum time to wait for neighbor to recover.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/reconnect-time	Session reconnect time.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/recovery-time	Recovery time.
<base_URI>/config/running/router/mpls/ldp/eol	Enter MPLS LDP EOL Config mode.
<base_URI>/config/running/router/mpls/ldp/eol/tx-label-silence-timer	Transmit label silence timer.

GET URIs	Description
<base_URI>/config/running/router/mpls/ldp/eol/notification-timer	Notification timer.
<base_URI>/config/running/router/mpls/ldp/tunnel-metric	LDP tunnel metric value.
<base_URI>/config/running/router/mpls/ldp/label-withdrawal-delay	LDP Label Withdrawal Delay.

POST URIs	Payload	Description
<base_URI>/config/running/router/mpls	<ldp />	Configures MPLS protocol.
<base_URI>/config/running/router/mpls/ldp	<session><ldp-session-ip>{req_val}</ldp-session-ip></session>	Define LDP Session.
<base_URI>/config/running/router/mpls/ldp	<targeted-peer><ldp-targeted-peer-ip>{req_val}</ldp-targeted-peer-ip></targeted-peer>	IP address of the targeted peer.
<base_URI>/config/running/router/mpls/ldp	<graceful-restart />	Enter MPLS LDP GR Config mode.
<base_URI>/config/running/router/mpls/ldp	<eol />	Enter MPLS LDP EOL Config mode.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/ldp/load-sharing	<load-sharing>{uint32}</load-sharing>	Number of load-sharing paths.
<base_URI>/config/running/router/mpls/ldp/hello-interval-link	<hello-interval-link>{uint32}</hello-interval-link>	Target interval in seconds. Range is 1-32767. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-interval-target	<hello-interval-target>{uint32}</hello-interval-target>	IDP time out in seconds. Range is 2-65535. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-link	<hello-timeout-link>{uint32}</hello-timeout-link>	IDP target time out in seconds. Range is 2-65535. Default is 45.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-target	<hello-timeout-target>{uint32}</hello-timeout-target>	Keep alive interval.
<base_URI>/config/running/router/mpls/ldp/ka-interval	<ka-interval>{uint32}</ka-interval>	Ka Interval in seconds. Range is 1-65535. Default is 6.
<base_URI>/config/running/router/mpls/ldp/ka-int-count	<ka-int-count>{uint32}</ka-int-count>	Ka interval count in seconds. Range is 1-65535. Default is 6.
<base_URI>/config/running/router/mpls/ldp/ka-timeout	<ka-timeout>{uint32}</ka-timeout>	Ka interval time out in seconds. Range is 1-65535.
<base_URI>/config/running/router/mpls/ldp/filter-fec-in	<filter-fec-in>{string}</filter-fec-in>	Apply filtering on inbound FECs.
<base_URI>/config/running/router/mpls/ldp/filter-fec-out	<filter-fec-out>{string}</filter-fec-out>	Apply filtering on outbound FECs.
<base_URI>/config/running/router/mpls/ldp/advertise-fec	<advertise-fec>{string}</advertise-fec>	Prefix-list specifying controls on destination prefixes.
<base_URI>/config/running/router/mpls/ldp/fec-128-for-auto-discovered	<fec-128-for-auto-discovered />	Use LDP FEC 128 for auto-discovered VPLS peers.
<base_URI>/config/running/router/mpls/ldp/lsr-id	<lsr-id>{inet:ipv4-address}</lsr-id>	Set IP address to be used as LSR id for LDP.
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}	<session><filter-fec-out>{string}</filter-fec-out></session>	Apply filtering on outbound FECs.
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}	<session><key>{string}</key></session>	Enable TCP-MD5 authentication.
<base_URI>/config/running/router/mpls/ldp/rx-label-silence-timer	<rx-label-silence-timer>{uint32}</rx-label-silence-timer>	Receive label silence time.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/ldp/graceful-restart/helper-only	<helper-only />	Helper only mode.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/max-neighbor-reconnect-time	<max-neighbor-reconnect-time>{uint32}</max-neighbor-reconnect-time>	Maximum time to wait for neighbor to reconnect.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/max-neighbor-recovery-time	<max-neighbor-recovery-time>{uint32}</max-neighbor-recovery-time>	Maximum time to wait for neighbor to recover.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/reconnect-time	<reconnect-time>{uint32}</reconnect-time>	Session reconnect time.
<base_URI>/config/running/router/mpls/ldp/graceful-restart/recovery-time	<recovery-time>{uint32}</recovery-time>	Recovery time.
<base_URI>/config/running/router/mpls/ldp/eol/tx-label-silence-timer	<tx-label-silence-timer>{uint32}</tx-label-silence-timer>	Transmit label silence timer.
<base_URI>/config/running/router/mpls/ldp/eol/notification-timer	<notification-timer>{uint32}</notification-timer>	Notification timer.
<base_URI>/config/running/router/mpls/ldp/tunnel-metric	<tunnel-metric>{uint32}</tunnel-metric>	DP tunnel metric value.
<base_URI>/config/running/router/mpls/ldp/label-withdrawal-delay	<label-withdrawal-delay>{uint32}</label-withdrawal-delay>	LDP Label Withdrawal Delay.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/ldp/load-sharing	<load-sharing>{uint32}</load-sharing>	Number of load-sharing paths.
<base_URI>/config/running/router/mpls/ldp/hello-interval-link	<hello-interval-link>{uint32}</hello-interval-link>	IDP interval in seconds. Range is 1-32767. Ddefault is 5.
<base_URI>/config/running/router/mpls/ldp/hello-interval-target	<hello-interval-target>{uint32}</hello-interval-target>	Target interval in seconds. Range is 1-32767. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-link	<hello-timeout-link>{uint32}</hello-timeout-link>	Time out interval in seconds. Range is 2-65535. Default is 15.
<base_URI>/config/running/router/mpls/ldp/hello-timeout-target	<hello-timeout-target>{uint32}</hello-timeout-target>	Targeted time out in seconds. Range is 2-65535. Default is 45.
<base_URI>/config/running/router/mpls/ldp/ka-interval	<ka-interval>{uint32}</ka-interval>	Ka Interval in seconds. Range is 1-65535. Default is 6.
<base_URI>/config/running/router/mpls/ldp/ka-int-count	<ka-int-count>{uint32}</ka-int-count>	Ka interval count in seconds. Range is 1-65535. Default is 6.
<base_URI>/config/running/router/mpls/ldp/ka-timeout	<ka-timeout>{uint32}</ka-timeout>	Ka interval time out in seconds. Rang is 1-65535.
<base_URI>/config/running/router/mpls/ldp/filter-fec-in	<filter-fec-in>{string}</filter-fec-in>	Apply filtering on inbound FECs.
<base_URI>/config/running/router/mpls/ldp/filter-fec-out	<filter-fec-out>{string}</filter-fec-out>	Apply filtering on outbound FECs.
<base_URI>/config/running/router/mpls/ldp/advertise-fec	<advertise-fec>{string}</advertise-fec>	Prefix-list specifying controls on destination prefixes.
<base_URI>/config/running/router/mpls/ldp/fec-128-for-auto-discovered	<fec-128-for-auto-discovered />	Use LDP FEC 128 for auto-discovered VPLS peers.
<base_URI>/config/running/router/mpls/ldp/lsr-id	<lsr-id>{inet:ipv4-address}</lsr-id>	Set IP address to be used as LSR id for LDP.
<base_URI>/config/running/router/mpls/ldp/session/{ldp-session-ip}/filter-fec-out	<filter-fec-out>{string}</filter-fec-out>	Apply filtering on outbound FECs.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mps/ldp/session/{ldp-session-ip}/key	<key>{string}</key>	Enable TCP-MD5 authentication.
<base_URI>/config/running/router/mps/ldp/rx-label-silence-timer	<rx-label-silence-timer>{uint32}</rx-label-silence-timer>	Receive label silence time.
<base_URI>/config/running/router/mps/ldp/graceful-restart/helper-only	<helper-only />	Helper only mode.
<base_URI>/config/running/router/mps/ldp/graceful-restart/max-neighbor-reconnect-time	<max-neighbor-reconnect-time>{uint32}</max-neighbor-reconnect-time>	Maximum time to wait for neighbor to reconnect.
<base_URI>/config/running/router/mps/ldp/graceful-restart/max-neighbor-recovery-time	<max-neighbor-recovery-time>{uint32}</max-neighbor-recovery-time>	Maximum time to wait for neighbor to recover.
<base_URI>/config/running/router/mps/ldp/graceful-restart/reconnect-time	<reconnect-time>{uint32}</reconnect-time>	Session reconnect time.
<base_URI>/config/running/router/mps/ldp/graceful-restart/recovery-time	<recovery-time>{uint32}</recovery-time>	Recovery time.
<base_URI>/config/running/router/mps/ldp/eol/tx-label-silence-timer	<tx-label-silence-timer>{uint32}</tx-label-silence-timer>	Transmit label silence timer.
<base_URI>/config/running/router/mps/ldp/eol/notification-timer	<notification-timer>{uint32}</notification-timer>	Notification timer.
<base_URI>/config/running/router/mps/ldp/tunnel-metric	<tunnel-metric>{uint32}</tunnel-metric>	DP tunnel metric value.
<base_URI>/config/running/router/mps/ldp/label-withdrawal-delay	<label-withdrawal-delay>{uint32}</label-withdrawal-delay>	LDP Label Withdrawal Delay.

DELETE URIs
<base_URI>/config/running/router/mps/ldp
<base_URI>/config/running/router/mps/ldp/load-sharing
<base_URI>/config/running/router/mps/ldp/hello-interval-link
<base_URI>/config/running/router/mps/ldp/hello-interval-target
<base_URI>/config/running/router/mps/ldp/hello-timeout-link
<base_URI>/config/running/router/mps/ldp/hello-timeout-target
<base_URI>/config/running/router/mps/ldp/ka-interval
<base_URI>/config/running/router/mps/ldp/ka-int-count
<base_URI>/config/running/router/mps/ldp/ka-timeout
<base_URI>/config/running/router/mps/ldp/filter-fec-in
<base_URI>/config/running/router/mps/ldp/filter-fec-out
<base_URI>/config/running/router/mps/ldp/advertise-fec
<base_URI>/config/running/router/mps/ldp/fec-128-for-auto-discovered
<base_URI>/config/running/router/mps/ldp/lsr-id
<base_URI>/config/running/router/mps/ldp/session/{ldp-session-ip}
<base_URI>/config/running/router/mps/ldp/session/{ldp-session-ip}/filter-fec-out
<base_URI>/config/running/router/mps/ldp/session/{ldp-session-ip}/key
<base_URI>/config/running/router/mps/ldp/targeted-peer/{ldp-targeted-peer-ip}
<base_URI>/config/running/router/mps/ldp/rx-label-silence-timer
<base_URI>/config/running/router/mps/ldp/graceful-restart



DELETE URIs
<base_URI>/config/running/router/mpls/ldp/graceful-restart/helper-only
<base_URI>/config/running/router/mpls/ldp/graceful-restart/max-neighbor-reconnect-time
<base_URI>/config/running/router/mpls/ldp/graceful-restart/max-neighbor-recovery-time
<base_URI>/config/running/router/mpls/ldp/graceful-restart/reconnect-time
<base_URI>/config/running/router/mpls/ldp/graceful-restart/recovery-time
<base_URI>/config/running/router/mpls/ldp/eol
<base_URI>/config/running/router/mpls/ldp/eol/tx-label-silence-timer
<base_URI>/config/running/router/mpls/ldp/eol/notification-timer
<base_URI>/config/running/router/mpls/ldp/tunnel-metric
<base_URI>/config/running/router/mpls/ldp/label-withdrawal-delay

## Parameters

### *ldp-session-ip*

efine LDP peer ip address.

### *ldp-targeted-peer-ip*

Peer IP Address.

### *load-sharing*

Number of load-sharing paths.

### *hello-interval-link*

In seconds {1-32767, default 5}.

### *hello-interval-target*

In seconds {1-32767, default 15}.

### *hello-timeout-link*

In seconds {2-65535, default 15}.

### *hello-timeout-target*

In seconds {2-65535, default 45}.

### *ka-interval*

In seconds {1-65535 default 6}.

### *ka-int-count*

In seconds {1-65535 default 6}.

### *ka-timeout*

In seconds {1-65535}.

### *filter-fec-in*

Apply filtering on inbound FECs.

### *filter-fec-out*

Apply filtering on inbound FECs.

### *advertise-fec*

In seconds {1-65535}.

### *lsr-id*

IP address to be used as LSR id for LDP.

*filter-fec-out*

Apply filtering on outbound FECs.

*rx-label-silence-timer*

Receive label silence time {100-60000 ms}. The default is 1000.

*key*

Enable TCP-MD5 authentication.

*rx-label-silence-timer*

Receive label silence time {100-60000 ms}. The default value is 1000.

*max-neighbor-reconnect-time*

Maximum time to wait for neighbor to reconnect {60-300 sec}. The default value is 120.

*max-neighbor-recovery-time*

Maximum time to wait for neighbor to recover {60-3600 sec}. The default value is 120.

*reconnect-time*

Session reconnect time {60-300 sec}. The default value is 120.

*recovery-time*

Recovery time {60-3600 sec}. The default value is 120.

*tx-label-silence-timer*

Transmit label silence timer {100-60000 msec}.The default value is 1000.

*notification-timer*

Notification timer {100-120000 msec}. The default value is 60000.

*tunnel-metric*

LDP tunnel metric value {1-65535; default 0}.

*label-withdrawal-delay*

The range is from 0 to 300. The default value is 60.

## Usage Guidelines

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

## Examples

The following example uses the GET option.

### URI

http://host:80/rest/config/running/router/mpls/ldp

### Request Body

None

### Response Body

```
<ldp xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/mpls/ldp">
</ldp>
```

The following example uses the POST option to configure an LDP.

### URI

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

### Request Body

```
<ldp />
```

### Response Body

None

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

### URI

http://host:80/rest/config/running/router/mpls/ldp

### Request Body

None

### Response Body

None

## History

Release version	History
16r.1.00	This API call was introduced.

# router/mpls/lsp

Defines LSP.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}	Defines LSP.

GET URIs	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/to	Retrieves LSP destination address.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf	Retrieves cspf.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/ipmtu	Retrieves IP Packet Maximum Transmission Unit configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/metric	Retrieves the LSP metric configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/revert-timer	Retrieves the lsp revert timer configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/tie-breaking	Retrieves the tie breaking mode configuration for cspf.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/from	Retrieves LSP source address.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/primary-path	Retrieves primary explicit path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/adaptive	Retrieves LSP/secpath adaptive configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/reoptimize-timer	Retrieves Reoptimization timer configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/commit	Retrieves adaptive LSP configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/record	Retrieves the recording path routes configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cos	Retrieves class of service.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/hop-limit	Retrieves the limit of hops the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf-computation-mode	Retrieves cspf-computation-mode configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/mean-rate	Retrieves the mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-rate	Retrieves the Max-rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-burst	Retrieves teh Max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/priority/include-all	Retrieves the administrative groups.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/soft-preemption	Retrieves the LSP soft preemption capability configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr	Retrieves the fast reroute options.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/hop-limit	Retrieves hop limit.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/link-protection	Retrieves link protection for LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority	Retrieves the fast reroute priority number.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/revertive/holdtime	Retrieves revertive hold time for the LSP.

GET URIs	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/revertive/global	Retrieves global revertive mode.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/standby	Retrieves the secondary-path hot standby configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf	Retrieves cspf status (Enable/Disable).
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/ipmtu	Retrieves IP Packet Maximum Transmission Unit configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/adaptive	Retrieves LSP/secpath to be adaptive.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/reoptimize-timer	Retrieves Reoptimization timer.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/commit	Retrieves the changes to adaptive LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/record	Retrieves recording path route status (Enable or disable).
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/cos	Retrieves class of service.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/hop-limit	Retrieves the hop limit which the LSP can traverse.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf-computation-mode	Retrieves cspf-computation-mode.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate	Retrieves the mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-rate	Retrieves the max-rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-burst	Retrieves the max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/priority/include-all	Retrieves the administrative groups.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/soft-preemption	Retrieves LSP soft preemption capability configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/enable	Retrieves LSP configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr	Displays Fast Reroute FRR configuration for an LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/bandwidth	Displays FRR bandwidth.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/hop-limit	Displays hop limit for FRR.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/facility-backup	Displays FRR facility backup protection status.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/priority	Displays priority for fast reroute.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority	Displays FRR LSP hold priority value.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw	Displays auto-bandwidth information
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/template	Displays auto-bandwidth template information.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-interval	Displays the configured adjustment-timer value.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-threshold	Displays the configured adjustment-threshold value.

GET URIs	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/min-bandwidth	Displays the configured minimum bandwidth.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/max-bandwidth	Displays the configured maximum bandwidth
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/overflow-limit	Displays the configured overflow-limit value.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/underflow-limit	Displays the number of samples that must be below the threshold to trigger a premature adjustment.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/mode	Displays auto-bandwidth mode.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/sample-recording	Displays whether the template is set to record the sample history.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw	Displays auto-bandwidth information for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/template	Displays auto-bandwidth template information for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-interval	Displays the configured adjustment-timer value for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-threshold	Displays the configured adjustment-threshold value for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/min-bandwidth	The configured minimum bandwidth for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/max-bandwidth	The configured maximum bandwidth for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/overflow-limit	Displays the configured overflow-limit value for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/underflow-limit	Displays the number of samples that must be below the threshold to trigger a premature adjustment for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/mode	Displays auto-bandwidth mode for secondary path for secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/sample-recording	Displays whether the template is set to record the sample history for secondary path.

POST URIs	Payload	Description
<base_URI>/config/running/router/mppls	<lsp><lsp-name>(req_val)</lsp-name></lsp>	Creates LSP configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<frr />	Creates LSP name.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<secondary-path><secpath-name>(req_val)</secpath-name></secondary-path>	Creates secondary path for the LSP and secondary explicit path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<autobw />	Configures auto-bandwidth for an LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}	<autobw />	Configures auto-bandwidth for a secondary path.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><to>{inet:ipv4-address}</to></lsp>	Updates lsp name.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><cspf>{enable-disable}</cspf></lsp>	Enables or disables cspf.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp>ipmtu<uint32>/ipmtu</lsp>	Updates IP Packet Maximum Transmission Unit.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><metric>{uint32}</metric></lsp>	Updates the LSP metric.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><revert-timer>{uint32}</revert-timer></lsp>	Updates lsp revert timer.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><tie-breaking>{tie-breaking}</tie-breaking></lsp>	Updates the tie breaking mode for cspf
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><from>{inet:ipv4-address}</from></lsp>	Updates LSP source address.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><primary-path>{string}</primary-path></lsp>	Updates primary explicit path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><adaptive /></lsp>	Updates LSP/secpath adaptive configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><reoptimize-timer>{uint32}</reoptimize-timer></lsp>	Updates reoptimization timer configuration.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><commit /></lsp>	Commit the changes to adaptive LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><record>{enable-disable}</record></lsp>	Enable/disable recording path routes
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><cos>{uint32}</cos></lsp>	Updates class of service.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><hop-limit>{uint16}</hop-limit></lsp>	Updates the limit of hops which the LSP can traverse.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode></lsp>	Updates cspf-computation-mode.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/traffic-engineering/mean-rate	<mean-rate>{uint32}</mean-rate>	Updates mean rate in kbps.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/traffic-engineering/max-rate	<max-rate>{uint32}</max-rate>	Updates max rate in kbps.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/traffic-engineering/max-burst	<max-burst>{uint32}</max-burst>	Updates Max-burst in bytes.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/priority/include-all	<lsp><setup-priority><include-all>{string}</include-all></lsp><setup-priority>	Updates the lsp setup priority to include all of the administrative groups.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}	<lsp><soft-preemption /></lsp>	Updates LSP soft preemption capability.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/hop-limit	<lsp><frr-bandwidth><hop-limit>{uint8}</hop-limit></lsp><frr-bandwidth>	Updates the max bandwidth (in kbits/sec) for Detour/Backup LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/hop-limit	<include-all><hop-limit>{uint8}</hop-limit></include-all>	Updates the administrative groups.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/link-protection	<link-protection />	Updates link protection for LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority	<lsp><frr-setup-priority><lsp-frr-hold-priority>{uint32}</lsp-frr-hold-priority></lsp><frr-setup-priority>	Updates the lsp-frr-hold-priority number.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/revertive/holdtime	<holdtime>{uint8}</holdtime>	Updates revertive hold time for the LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/revertive/global	<global>{enable-disable}</global>	Updates global revertive mode.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><standby /></secondary-path>	Updates secondary Path for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><ospf>{enable-disable}</ospf></secondary-path>	Updates secondary Path name for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><ipmtu>{uint32}</ipmtu></secondary-path>	Updates secondary path and IP packet maximum transmission unit for the LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><adaptive /></secondary-path>	Updates LSP/secpath adaptive configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><reoptimize-timer>{uint32}</reoptimize-timer></secondary-path>	Updates reoptimization timer.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><commit /></secondary-path>	Commit the changes to adaptive LSP.
rest/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><record>{enable-disable}</record></secondary-path>	Enable/disable recording path routes.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><cos>{uint32}</cos></secondary-path>	Updates class of service.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><hop-limit>{uint16}</hop-limit></secondary-path>	Updates limit of hops which the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><ospf-computation-mode>{ospf-computation-mode}</ospf-computation-mode></secondary-path>	Updates ospf-computation-mode.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate	<mean-rate>{uint32}</mean-rate>	Updates mean rate.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-rate	<max-rate>{uint32}</max-rate>	Updates max rate.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-burst	<max-burst>{uint32}</max-burst>	Updates max-burst.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/priority/include-all	<lsp-setup-priority><include-all>{string}</include-all></lsp-setup-priority>	Updates administrative groups.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}	<secondary-path><soft-preemption /></secondary-path>	Updates LSP soft preemption capability.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}	<lsp-select-path-mode><primary /><lsp>()</lsp><enable /></lsp-select-path-mode>	Updates manual path select mode.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}	<lsp-select-path-mode><secondary>{leafref}</secondary><lsp>()</lsp><enable /></lsp-select-path-mode>	Updates a secondary path as selected path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/bandwidth	<bandwidth><lsp-frr-bandwidth>{uint32}</lsp-frr-bandwidth></bandwidth>	Updates the FRR bandwidth for an LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/bandwidth	<bandwidth><inherit>true</inherit></bandwidth>	Add bandwidth to an FRR path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr	<frr><hop-limit>{uint8}</hop-limit></frr>	Configures the number of hops the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr	<frr><facility-backup>true</facility-backup></frr>	Configures MPLS fast reroute by using the one-to-one backup method for a defined LSP



PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/priority	<priority><lsp-frr-setup-priority>{uint32}</lsp-frr-setup-priority><lsp-frr-hold-priority>{uint32}</lsp-frr-hold-priority></priority>	Updates setup and hold priorities for the FRR detour routes within a specified LSP.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/to	<to>{inet:ipv4-address}</to>	Configures LSP destination address.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf	<cspf>{enable-disable}</cspf>	Configures cspf.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/ipmtu	<ipmtu>{uint32}</ipmtu>	Configures IP Packet Maximum Transmission Unit configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/metric	<metric>{uint32}</metric>	Configures the LSP metric.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/revert-timer	<revert-timer>{uint32}</revert-timer>	Configures lsp revert timer configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/tie-breaking	<tie-breaking>{tie-breaking}</tie-breaking>	Configures the tie breaking mode for cspf.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/from	<from>{inet:ipv4-address}</from>	Configures LSP source address.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/primary-path	<primary-path>{string}</primary-path>	Configures primary explicit path.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/adaptive	<adaptive />	Configures LSP/secpath adaptive configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/reoptimize-timer	<reoptimize-timer>{uint32}</reoptimize-timer>	Configures reoptimization timer configuration.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/commit	<commit />	Commit the changes to adaptive LSP.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/record	<record>{enable-disable}</record>	Enable/disable recording path routes.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cos	<cos>{uint32}</cos>	Configure class of service.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/hop-limit	<hop-limit>{uint16}</hop-limit>	Limit of hops the LSP can traverse.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf-computation-mode	<cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode>	Specify cspf-computation-mode.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/mean-rate	<mean-rate>{uint32}</mean-rate>	Mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-rate	<max-rate>{uint32}</max-rate>	Max-rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-burst	<max-burst>{uint32}</max-burst>	Max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/priority/include-all	<lsp-setup-priority><include-all>{string}</include-all></lsp-setup-priority>	Include any of the administrative groups.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/soft-preemption	<soft-preemption />	Set LSP soft preemption capability.
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/hop-limit	<lsp-frr-bandwidth><hop-limit>{uint8}</hop-limit></lsp-frr-bandwidth>	Set Fast Reroute options.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/hop-limit	<include-all><hop-limit>{uint8}</hop-limit></include-all>	Set hop limit.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/link-protection	<link-protection />	Configures link protection for LSP.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority	<lsp-frr-setup-priority><lsp-frr-hold-priority>{uint32}</lsp-frr-hold-priority></lsp-frr-setup-priority>	Fast Reroute priority number.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/revertive/holdtime	<holdtime>{uint8}</holdtime>	Configure revertive hold time for the LSP.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/revertive/global	<global>{enable-disable}</global>	Configures global revertive mode.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/standby	<standby />	Make secondary-path hot standby.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf	<cspf>{enable-disable}</cspf>	Enable/Disable cspf.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/ipmtu	<ipmtu>{uint32}</ipmtu>	Enables IP Packet Maximum Transmission Unit.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/adaptive	<adaptive />	Configure LSP/secpath to be adaptive.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/reoptimize-timer	<reoptimize-timer>{uint32}</reoptimize-timer>	Configure Reoptimization timer.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/commit	<commit />	Commit the changes to adaptive LSP.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/record	<record>{enable-disable}</record>	Enable or disable recording path routes.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/cos	<cos>{uint32}</cos>	Configure class of service.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/hop-limit	<hop-limit>{uint16}</hop-limit>	Configures the hop limit which the LSP can traverse.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf-computation-mode	<cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode>	Configures cspf-computation-mode.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate	<mean-rate>{uint32}</mean-rate>	Mean rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-rate	<max-rate>{uint32}</max-rate>	Max-rate in kbps. Range is 0-2147483647.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-burst	<max-burst>{uint32}</max-burst>	Max-burst in bytes. Range is 0-2147483647.
<base_URI>/config/running/router/mps/lsp/{lsp-name}/secondary-path/{secpath-name}/priority/include-all	<lsp-setup-priority><include-all>{string}</include-all></lsp-setup-priority>	Configures any of the administrative groups.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/soft-preemption	<soft-preemption />	Configures LSP soft preemption capability.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/enable	<lsp-select-path-mode><primary /><enable /></lsp-select-path-mode>	Configures LSP.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/enable	<lsp-select-path-mode><secondary><leafref></secondary><enable /></lsp-select-path-mode>	Configures a selected lsp path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/frr/facility-backup	<facility-backup>true</facility-backup>	Enables facility backup
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw	<autobw />	Configures autobandwidth
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-interval	<adjustment-interval>{uint32}</adjustment-interval>	Time interval after which the LSP bandwidth should be adjusted
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-threshold/threshold-percentage	<threshold-percentage>{uint32}</threshold-percentage>	Configures threshold percentage: Bandwidth will be adjusted only if percentage difference of Max-Sample-BW w.r.t current-BW is greater than this value. Range 1-100%. Default: 0%.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/adjustment-threshold/use-threshold-table	<use-threshold-table>true</use-threshold-table>	Configures an LSP to use a threshold table.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/max-bandwidth	<max-bandwidth>{uint32}</max-bandwidth>	Configures maximum bandwidth. The LSP bandwidth can never be greater than this value. max-bandwidth cannot be configured to be greater than the configured traffic-eng max-rate. Range 0 - 2147483647 kbps. Default: 0
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/min-bandwidth	<min-bandwidth>{uint32}</min-bandwidth>	Configures minimum bandwidth ,The LSP bandwidth can never be lower than this value. Range 0 - 2147483647 kbps. Default: 0
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/mode	<mode>{autobw-mode}</mode>	Sets autobandwidth to either monitor-only or monitor-and-signal.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/overflow-limit	<overflow-limit>{uint32}</overflow-limit>	Sets the least number of times the sampled-BW should consecutively overflow adjustment-threshold to trigger premature adjustment. Range 0 - 65535. Default = 0 (never adjust for limit overflow).
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/sample-recording	<sample-recording>{enable-disable}</sample-recording>	Disables or enables sample recording.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/template	<template>{leafref}</template>	Configures a primary LSP path to use an auto-bandwidth template.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/autobw/underflow-limit	<underflow-limit>{uint32}</underflow-limit>	Sets the number of samples that must be below the threshold to trigger a premature adjustment for primary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw	<autobw />	Configures a secondary LSP path to use an auto-bandwidth template.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-interval	<adjustment-interval>{uint32}</adjustment-interval>	Time interval after which the LSP bandwidth should be adjusted

PUT URIs	Payload	Description
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-threshold/threshold-percentage	<threshold-percentage>{uint32}</threshold-percentage>	Configures threshold percentage: Bandwidth will be adjusted only if percentage difference of Max-Sample-BW w.r.t current-BW is greater than this value. Range 1-100%. Default: 0%.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-threshold/use-threshold-table	<use-threshold-table>true</use-threshold-table>	Configures an LSP to use a threshold table.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/max-bandwidth	<max-bandwidth>{uint32}</max-bandwidth>	Configures maximum bandwidth for secondary path. The LSP bandwidth can never be greater than this value. max-bandwidth cannot be configured to be greater than the configured traffic-eng max-rate. Range 0 - 2147483647 kbps. Default: 0
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/min-bandwidth	<min-bandwidth>{uint32}</min-bandwidth>	Configures minimum bandwidth for secondary path ,The LSP bandwidth can never be lower than this value. Range 0 - 2147483647 kbps. Default: 0
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/mode	<mode>{autobw-mode}</mode>	Sets the secondary LSP to monitor-only or monitor-and-signal mode.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/overflow-limit	<overflow-limit>{uint32}</overflow-limit>	Sets the least number of times the sampled-BW should consecutively overflow adjustment-threshold to trigger premature adjustment, for secondary path. Range 0 - 65535. Default = 0 (never adjust for limit overflow).
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/sample-recording	<sample-recording>{enable-disable}</sample-recording>	Enables or disables sample recording for a secondary path.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/template	<template>{leafref}</template>	Configures a secondary LSP path to use an auto-bandwidth template.
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/underflow-limit	<underflow-limit>{uint32}</underflow-limit>	Sets the number of samples which must be below the threshold to trigger a premature adjustment.

DELETE URIs
<base_URI>/config/running/router/mppls/lsp/{lsp-name}
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/to
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/cspf
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/ipmtu
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/metric
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/revert-timer
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/tie-breaking
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/from
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/primary-path
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/adaptive
<base_URI>/config/running/router/mppls/lsp/{lsp-name}/reoptimize-timer

DELETE URIs
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/commit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/record
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cos
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/hop-limit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/cspf-computation-mode
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/mean-rate
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-rate
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/traffic-engineering/max-burst
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/priority/include-all
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/soft-preemption
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/hop-limit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/link-protection
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/priority/lsp-frr-hold-priority
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/revertive/holdtime
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr/revertive/global
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/standby
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/ipmtu
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/adaptive
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/reoptimize-timer
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/commit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/record
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/cos
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/hop-limit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/cspf-computation-mode
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/mean-rate
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-rate
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/traffic-engineering/max-burst
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/priority/include-all
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/soft-preemption
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/adjustment-threshold
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/max-bandwidth
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/min-bandwidth
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/mode
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/overflow-limit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/sample-recording
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/secondary-path/{secpath-name}/autobw/underflow-limit
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/enable
<base_URI>/config/running/router/mpls/lsp/{lsp-name}/frr

DELETE URIs
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/bandwidth
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/hop-limit
<base_URI>/config/running/router/mps/lsp/{lsp-name}/frr/facility-backup
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/adjustment-threshold
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/max-bandwidth
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/min-bandwidth
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/mode
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/overflow-limit
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/sample-recording
<base_URI>/config/running/router/mps/lsp/{lsp-name}/autobw/underflow-limit

## Parameters

*lsp-name*

Name (up to 64 characters).

*secpath-name*

Secondary explicit path name (up to 64 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; value of {lsp-name} is test2. .

### URI

http://host:80/rest/config/running/router/mps/lsp/{lsp-name}/frr

### Request Body

None

### Response Body

```
<frr xmlns="urn:brocade.com:mgmt:brocade-mps" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/router/mps/lsp/test2/frr">
  <bandwidth y:self="/rest/config/running/router/mps/lsp/test2/frr/bandwidth">
    </bandwidth>
  <facility-backup>true</facility-backup>
  <priority y:self="/rest/config/running/router/mps/lsp/test2/frr/priority">
    </priority>
  <revertive y:self="/rest/config/running/router/mps/lsp/test2/frr/revertive">
    </revertive>
</frr>
```

The following example uses the PATCH option to set the bandwidth to 500; value of {lsp-name} is test2.

### **URI**

http://host:80/rest/config/running/router/mpls/lsp/{lsp-name}/frr/bandwidth

### **Request Body**

```
<bandwidth><lsp-frr-bandwidth>500</lsp-frr-bandwidth></bandwidth>
```

### **Response Body**

None.

The following example uses the DELETE option to delete frr bandwidth; {lsp-name} is test2.

### **URI**

http://host:80/rest/config/running/router/mpls/lsp/test2/frr/bandwidth

### **Request Body**

None

### **Response Body**

None

## History

Release version	History
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include FRR URIs.

# router/mpls/mpls-interface

Defines MPLS Interface.

## Resource URIs

URI	Description
/rest/config/running/router/mpls/mpls-interface	Defines MPLS Interface.

GET URIs	Descriptions
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-enable	Enable LDP on Interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params	Configure LDP parameters.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-interval	Configure hello Interval.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-timeout	Configure hello-timeout.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp	Configure RSVP parameters.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/authentication/key	MD5 key.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello	Enable RSVP Hello on the interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/interval	Interval between two RSVP Hello requests.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/tolerance	Number of unacknowledged RSVP Hello requests before timeout.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello-disable	Disable RSVP Hello on the interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/te-metric	Set te-metric for this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/admin-group	Administrative groups.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/summary-refresh	Refresh Reduction Summary Refresh feature.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/bundle-message	Refresh Reduction bundle messaging feature.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/bundle-message/bundle-send-delay	Configure bundle send delay value.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/disable	Disable RSVP Refresh reduction on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging	Configure RSVP Reliable messaging on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-decay	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.



GET URIs	Descriptions
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-interval	Interval for an unacknowledged message to be resent.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retry-limit	Maximum number of retries for an unacknowledged message.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/disable	Disable RSVP Reliable messaging on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	Displays dynamic bypass configuration.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/disable	Displays whether dynamic bypass is disabled for an interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/max-bypasses	Displays interface level maximum number of dynamic bypasses.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/max-bypasses-per-mp	Displays interface level maximum number of dynamic bypasses per merge point.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/reoptimize-timer	Displays interface level reoptimizer timer value for dynamic bypasses.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/cos	Displays interface level cos value for dynamic bypasses.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/from	Displays interface level from address for dynamic bypasses.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/adaptive	Displays interface level adaptiveness of dynamic bypasses.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/record-route	Displays interface level record route for dynamic bypasses
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/hop-limit	Displays interface level hop limit value for dynamic bypasses.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/exclude-any	Exclude any of the administrative groups
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/include-any	Include any of the administrative groups
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/include-all	Include all of the administrative groups
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/primary-path	Set primary explicit path
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/name-prefix	Displays interface level dynamic bypass name prefix.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/tie-breaking	Displays interface level dynamic bypass cspf tie breaking mechanism.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/cspf-computation-mode	Interface level dynamic bypass cspf computation mode.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/priority	Displays interface level dynamic bypass setup and holding priority level.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/priority/interface-dynamic-bypass-holding-priority	Displays holding priority for dynamic bypass LSPs. Range 0-7.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng	Displays traffic information.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/max-burst	Displays traffic maximum burst rate.

GET URIs	Descriptions
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/max-rate	Displays traffic maximum rate.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/mean-rate	Displays traffic mean rate.

POST URIs	Payload	Description
<base_URI>/config/running/router/mppls	<mpls-interface><interface-type>(req_val)</interface-type><interface-name>(req_val)</interface-name></mpls-interface>	Enable LDP on Interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}	<ldp-params />	Configure LDP parameters.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}	<rsvp />	Configure RSVP parameters.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp	<hello />	Enable RSVP Hello on the interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp	<admin-group />	Administrative groups.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction	<bundle-message />	Refresh Reduction bundle messaging feature.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp	<reliable-messaging />	Configure RSVP Reliable messaging on this interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}	<dynamic-bypass />	Configures dynamic bypass for ths interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}	<mpls-interface><ldp-enable /></mpls-interface>	Enable LDP on Interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/ldp-params/hello-interval	<hello-interval>(uint32)</hello-interval>	Interval between two RSVP Hello requests.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/ldp-params/hello-timeout	<hello-timeout>(uint32)</hello-timeout>	Configure LDP parameters and hello Interval.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp/authentication/key	<reservable-bandwidth><key>(string)</key></reservable-bandwidth>	Enable RSVP authentication on this interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp/authentication/key	<percentage><key>(string)</key></percentage>	Enable RSVP authentication on this interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/rsvp/hello/interval	<interval>(uint32)</interval>	Interval between two RSVP Hello requests.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/tolerance	<tolerance>{uint32}</tolerance>	Number of unacknowledged RSVP Hello requests before timeout.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello-disable	<hello-disable />	Disable RSVP Hello on the interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/te-metric	<te-metric>{uint32}</te-metric>	Set te-metric for this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/summary-refresh	<summary-refresh />	Refresh Reduction Summary Refresh feature.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/bundle-message/bundle-send-delay	<bundle-send-delay>{uint32}</bundle-send-delay>	Configure bundle send delay value.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/disable	<disable />	Disable RSVP Refresh reduction on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-decay	<rapid-retrans-decay>{uint32}</rapid-retrans-decay>	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-interval	<rapid-retrans-interval>{uint32}</rapid-retrans-interval>	Interval for an unacknowledged message to be resent.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retry-limit	<rapid-retry-limit>{uint32}</rapid-retry-limit>	Maximum number of retries for an unacknowledged message.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/disable	<disable />	Disable RSVP Reliable messaging on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><disable>true</disable></dynamic-bypass>	Disables dynamic bypass for this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><max-bypasses>{uint32}</max-bypasses></dynamic-bypass>	Sets the limit for total number of dynamic bypass LSPs that can be created for this protected MPLS interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><max-bypasses-per-mp>{uint32}</max-bypasses-per-mp></dynamic-bypass>	Sets the maximum number of dynamic bypass LSPs that can be created for this MPLS interface and reaching to any Merge Point.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><reoptimize-timer>{uint32}</reoptimize-timer></dynamic-bypass>	Configures a reoptimization timer value for all the adaptive dynamic bypass LSPs that are being created on a protected interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><cos>{uint32}</cos></dynamic-bypass>	Configures cos value (0-7) for dynamic bypass LSPs that will be created on an interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><from>{inet.ip-address}</from></dynamic-bypass>	Configures LSP source address for an interface.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><adaptive>{enable-disable}</adaptive></dynamic-bypass>	Enables or disables adaptiveness for dynamic bypass LSPs. Default: enable.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><record-route>{enable-disable}</record-route></dynamic-bypass>	Enables or disables option to set record route option for the dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><hop-limit>{uint8}</hop-limit></dynamic-bypass>	Configures interface level hop-limit.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><exclude-any>{string}</exclude-any></dynamic-bypass>	Sets exclude-any configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><include-any>{string}</include-any></dynamic-bypass>	Sets include-any configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><include-all>{string}</include-all></dynamic-bypass>	Sets include-all configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><primary-path>{string}</primary-path></dynamic-bypass>	Sets an explicit configured path for the dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><name-prefix>{string}</name-prefix></dynamic-bypass>	Sets a name prefix for the dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><tie-breaking>{tie-breaking}</tie-breaking></dynamic-bypass>	Sets tie-breaking option for Dynamic Bypass LSP path computation tie breaking procedure. Allowed values: random, least-fill, most-fill. Default is random.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass	<dynamic-bypass><cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode></dynamic-bypass>	Sets CSPF computation mode. Values: te-metric or igp-metric.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/priority	<priority><interface-dynamic-bypass-setup-priority>{uint32}</interface-dynamic-bypass-setup-priority><interface-dynamic-bypass-holding-priority>{uint32}</interface-dynamic-bypass-holding-priority></priority>	Configures the setup and holding priority for dynamic bypass LSPs.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng	<traffic-eng><max-burst>{uint32}</max-burst></traffic-eng>	Configures traffic maximum burst rate.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng	<traffic-eng><max-rate>{uint32}</max-rate></traffic-eng>	Configures traffic mean rate.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng	<traffic-eng><mean-rate>{uint32}</mean-rate></traffic-eng>	Configures traffic mean rate.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-enable	<ldp-enable />	Enable LDP on Interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-interval	<hello-interval>{uint32}</hello-interval>	Interval between two RSVP Hello requests.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-timeout	<hello-timeout>(uint32)</hello-timeout>	LDP parameters and hello Interval.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/authentication/key	<reservable-bandwidth><key>(string)</key></reservable-bandwidth>	Enable RSVP authentication on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/interval	<interval>(uint32)</interval>	Interval between two RSVP Hello requests.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/tolerance	<tolerance>(uint32)</tolerance>	Number of unacknowledged RSVP Hello requests before timeout.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello-disable	<hello-disable />	Disable RSVP Hello on the interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/te-metric	<te-metric>(uint32)</te-metric>	Set te-metric for this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/summary-refresh	<summary-refresh />	Refresh Reduction Summary Refresh feature.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/bundle-message/bundle-send-delay	<bundle-send-delay>(uint32)</bundle-send-delay>	Configures bundle send delay value.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/disable	<disable />	Disable RSVP Refresh reduction on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-decay	<rapid-retrans-decay>(uint32)</rapid-retrans-decay>	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-interval	<rapid-retrans-interval>(uint32)</rapid-retrans-interval>	Interval for an unacknowledged message to be resent.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retry-limit	<rapid-retry-limit>(uint32)</rapid-retry-limit>	Maximum number of retries for an unacknowledged message.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/disable	<disable />	Disable RSVP Reliable messaging on this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/disable	<disable>true</disable>	Disables dynamic bypass for this interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/max-bypasses	<max-bypasses>(uint32)</max-bypasses>	Sets the limit for total number of dynamic bypass LSPs that can be created for this protected MPLS interface.
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/max-bypasses-per-mp	<max-bypasses-per-mp>(uint32)</max-bypasses-per-mp>	Sets the maximum number of dynamic bypass LSPs that can be created for this MPLS interface and reaching to any Merge Point.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/reoptimize-timer	<reoptimize-timer>{uint32}</reoptimize-timer>	Configures a reoptimization timer value for all the adaptive dynamic bypass LSPs that are being created on a protected interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/cos	<cos>{uint32}</cos>	Configures cos value (0-7) for dynamic bypass LSPs that will be created on an interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/from	<from>{inet.ip-address}</from>	Configures LSP source address for an interface.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/adaptive	<adaptive>{enable-disable}</adaptive>	Enables or disables adaptiveness for dynamic bypass LSPs. Default: enable.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/record-route	<record-route>{enable-disable}</record-route>	Enables or disables option to set record route option for the dynamic bypass LSPs
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/hop-limit	<hop-limit>{uint8}</hop-limit>	Configures interface level hop-limit.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/exclude-any	<exclude-any>{string}</exclude-any>	Sets exclude-any configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/include-any	<include-any>{string}</include-any>	Sets include-any configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/include-all	<include-all>{string}</include-all>	Sets include-all configuration for administrative groups for dynamic bypass LSPs.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/primary-path	<primary-path>{string}</primary-path>	Sets an explicit configured path for the dynamic bypass LSPs.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/name-prefix	<name-prefix>{string}</name-prefix>	Sets a name prefix for the dynamic bypass LSPs.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/tie-breaking	<tie-breaking>{tie-breaking}</tie-breaking>	Sets tie-breaking option for Dynamic Bypass LSP path computation tie breaking procedure. Allowed values; random, least-fill, most-fill. Default is random.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/cspf-computation-mode	<cspf-computation-mode>{cspf-computation-mode}</cspf-computation-mode>	Sets CSPF computation mode. Values: te-metric or igp-metric.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/priority	<priority><interface-dynamic-bypass-setup-priority>{uint32}</interface-dynamic-bypass-setup-priority><interface-dynamic-bypass-holding-priority>{uint32}</interface-dynamic-bypass-holding-priority></priority>	Configures the setup and holding priority for dynamic bypass LSPs.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/max-burst	<max-burst>{uint32}</max-burst>	Configures traffic maximum burst rate.
<base_URI>/config/running/router/mppls/mppls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/max-rate	<max-rate>{uint32}</max-rate>	Configures traffic mean rate.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/mean-rate	<mean-rate>{uint32}</mean-rate>	Configures traffic mean rate.

DELETE URIs
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-enable
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-interval
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/ldp-params/hello-timeout
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/authentication/key
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/interval
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello/tolerance
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/hello-disable
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/te-metric
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/admin-group
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/summary-refresh
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/bundle-message
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/bundle-message/bundle-send-delay
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/refresh-reduction/disable
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-decay
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retrans-interval
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/rapid-retry-limit
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/rsvp/reliable-messaging/disable
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/max-bypasses-per-mp
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/reoptimize-timer
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/cos
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/from
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/adaptive
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/record-route
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/hop-limit
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/exclude-any
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/include-any
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/include-all
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/primary-path
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/name-prefix
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/tie-breaking

DELETE URIs
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/cspf-computation-mode
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/priority
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/max-rate
<base_URI>/config/running/router/mpls/mpls-interface/{interface-type},{interface-name}/dynamic-bypass/traffic-eng/mean-rate

## Parameters

*interface-type*

Interface type.

*interface-name*

Port number of the interface.

*hello-interval*

Range is from 1 to 32767. The default value is 5.

*hello-timeout*

The range is from 2 to 65535. The default value is 15.

*key*

The range is from 0 to 2000000000.

*interval*

The range is from 1 to 60. The default value is 9.

*tolerance*

The range is from 1 to 255. The default is 3.

*te-matric*

The range is from 1 to 65535.

*bundle-send-delay*

The range is from 20 to 1000. The default value is 40.

*rapid-retrans-decay*

The range is from 0 to 100. The default value is 100.

*rapid-retrans-interval*

The range is from 100 to 30000. The default is 2000.

*rapid-retry-limit*

The range is from 1 to 16. The default is 5.

*max-bypasses*

Interface level maximum number of dynamic bypasses .

*max-bypasses-per-mp*

Interface level maximum number of dynamic bypasses .

*reoptimize-timer*

Interface level reoptimizer timer value for dynamic bypasses.

*cos*

Interface level cos value for dynamic bypasses.



<i>from</i>	Interface level from address for dynamic bypasses.
<i>adaptive</i>	Interface level adaptiveness of dynamic bypasses.
<i>record-route</i>	Interface level record route for dynamic bypasses.
<i>hop-limit</i>	Interface level hop limit value for dynamic bypasses.
<i>exclude-any</i>	Exclude any of the administrative groups
<i>include-any</i>	Include any of the administrative groups
<i>include-all</i>	Include all of the administrative groups.
<i>primary-path</i>	The primary explicit path.
<i>name-prefix</i>	Interface level dynamic bypass name prefix.
<i>tie-breaking</i>	Interface level dynamic bypass cspf tie breaking mechanism.
<i>cspf-computation-mode</i>	Interface level dynamic bypass cspf cspf computation mode.
<i>nterface-dynamic-bypass-holding-priority</i>	Holding priority for the dynamic bypass LSPs. Range 0-7.
<i>max-burst</i>	Traffic maximum burst rate. Range 0-2147483647 Bytes
<i>max-rate</i>	Traffic maximum rate. Range 0-2147483647 kbps
<i>mean-rate</i>	Traffic mean rate. Range 0-2147483647 kbps

## Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve the max-bypasses value.

### URI

http://host:80/rest/config/running/router/mpls/mpls-interface/ethernet%2C%220/2%22/dynamic-bypass/max-bypasses

### Request Body

None

### Response Body

```
<max-bypasses xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/mpls/mpls-interface/ethernet%2C%220/2%22/dynamic-bypass/max-bypasses">20</max-bypasses>
```

The following example uses the PUT option to set max-bypasses.

### URI

http://host:80/rest/config/running/router/mpls/mpls-interface/ethernet%2C%220/2%22/dynamic-bypass/max-bypasses

### Request Body

```
<max-bypasses>20</max-bypasses>
```

### Response Body

None

The following example uses the DELETE option to remove max-bypasses-per-mp.

### URI

http://host:80/rest/config/running/router/mpls/mpls-interface/ethernet%2C%220/2%22/dynamic-bypass/max-bypasses-per-mp

### Request Body

None

### Response Body

None

## History

Release version	History
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include Dynamic Bypass URIs.

# router/mpls/policy

Configures MPLS policy.

## Resource URIs

URI	Description
<base_URI>/config/running/router/mpls/policy	Enters MPLS Policy configuration mode.

GET URI	Description
<base_URI>/config/running/router/mpls/policy/backup-retry-time	Configures Backup retry time.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/ignore-overload-bit	Ignores overload bit during CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/metric-type	Selects metric type for CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty	Adds penalty of all matching CSPF-groups to TE metric of TE link.
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint	Uses interface IP address for CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-metric	Displays Bypass Path cost for FRR LSP backup path.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-liberal	Displays information on Liberal mode of Bypass selection.
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down	Configures MPLS to handle ISIS neighbor down event.
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down	Configures MPLS to handle OSPF neighbor down event.
<base_URI>/config/running/router/mpls/policy/retry-time	Configures LSP retry time.
<base_URI>/config/running/router/mpls/policy/retry-limit	Configures LSP retry limit.
<base_URI>/config/running/router/mpls/policy/rapid-retry	Configures Rapid retry.
<base_URI>/config/running/router/mpls/policy/rsvp-periodic-flooding-time	Set the interval for RSVP TE periodic flooding.
<base_URI>/config/running/router/mpls/policy/up	Bandwidth percentage when bandwidth is increased.
<base_URI>/config/running/router/mpls/policy/soft-preemption/cleanup-timer	Defines timer value for soft preemption to happen.
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	IS-IS traffic engineering parameters.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	Configures MPLS TTL and QOS propagation model.
<base_URI>/config/running/router/mpls/policy/ingress-tunnel-accounting	Enables Traffic Statistics for Tunnels.
<base_URI>/config/running/router/mpls/policy/transit-session-accounting	Enables Traffic Statistics for transit sessions.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth	Displays auto-bandwidth details.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/sample-interval	Displays sample interval: the time after which the traffic rate is sampled.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/num-sample-record	Displays number of samples collected in the current adjustment-interval.

GET URI	Description
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-liberal	Displays information on Liberal mode of Bypass selection.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-metric	Displays Bypass Path cost.

POST URIs	Payload	Description
<base_URI>/config/running/router/mpls	<policy />	Enters MPLS Policy configuration mode.
<base_URI>/config/running/router/mpls/policy	<admin-group> <admin-group-name>{req_val}</admin-group-name> <admin-group-number>{req_val}</admin-group-number> </admin-group>	Sets administrative group names.
<base_URI>/config/running/router/mpls/policy	<up />	Sets bandwidth percentage when bandwidth is increased.
<base_URI>/config/running/router/mpls/policy	<auto-bandwidth />	Configures auto-bandwidth.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/policy/backup-retry-time	<backup-retry-time>{uint32}</backup-retry-time>	Configures Backup retry time.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/ignore-overload-bit	<ignore-overload-bit />	Ignores overload bit during CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode	<cspf-computation-mode><use-bypass-liberal>true</use-bypass-liberal></cspf-computation-mode>	Enables liberal mode.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode	<cspf-computation-mode><use-bypass-metric>true</use-bypass-metric></cspf-computation-mode>	Enabled bypass metric.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/metric-type	<metric-type>{cspf-computation-mode}</metric-type>	Selects metric type for CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty	<add-penalty />	Adds penalty of all matching CSPF-groups to TE metric of TE link.
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint	<cspf-interface-constraint />	Uses interface IP address for CSPF computation.
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down	<handle-isis-neighbor-down />	Configures MPLS to handle ISIS neighbor down event.
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down	<handle-ospf-neighbor-down />	Configures MPLS to handle OSPF neighbor down event.
<base_URI>/config/running/router/mpls/policy/retry-time	<retry-time>{uint32}</retry-time>	Configures LSP retry time.
<base_URI>/config/running/router/mpls/policy/retry-limit	<retry-limit>{uint32}</retry-limit>	Configures LSP retry limit.
<base_URI>/config/running/router/mpls/policy/rapid-retry	<rapid-retry>{enable-disable}</rapid-retry>	Configures Rapid retry.
<base_URI>/config/running/router/mpls/policy/rsvp-periodic-flooding-time	<rsvp-periodic-flooding-time>{uint32}</rsvp-periodic-flooding-time>	Sets the interval for RSVP TE periodic flooding.
<base_URI>/config/running/router/mpls/policy/soft-preemption/cleanup-timer	<cleanup-timer>{uint32}</cleanup-timer>	Defines timer value for soft preemption to happen.

PATCH URIs	Payload	Description
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	<all><isis>{enumeration}</isis></all>	Enables implicit commit for all triggers and advertises via IS-IS.
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	<lsp-reoptimize-timer><isis>{enumeration}</isis></lsp-reoptimize-timer>	Enables implicit commit for reoptimizations and advertises via IS-IS.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	<ospf-area-as-ip-address><qos-ttl-mode>{enumeration}</qos-ttl-mode></ospf-area-as-ip-address>	MPLS TTL and QoS propagation model.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	<all><qos-ttl-mode>{enumeration}</qos-ttl-mode></all>	MPLS TTL and QoS propagation model.
<base_URI>/config/running/router/mpls/policy/ingress-tunnel-accounting	<ingress-tunnel-accounting />	Enables Traffic Statistics for Tunnels.
<base_URI>/config/running/router/mpls/policy/transit-session-accounting	<transit-session-accounting />	Enables Traffic Statistics for transit sessions.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/policy/backup-retry-time	<backup-retry-time>{uint32}</backup-retry-time>	Configures Backup retry time.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/ignore-overload-bit	<ignore-overload-bit />	Ignores overload bit during CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/metric-type	<metric-type>{cspf-computation-mode}</metric-type>	Selects metric type for CSPF computation.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-liberal	<use-bypass-liberal>true</use-bypass-liberal>	Enables Liberal mode of Bypass selection.
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-metric	<use-bypass-metric>true</use-bypass-metric>	Enable Use Bypass Path cost for FRR LSP backup path.
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty	<add-penalty />	Adds penalty of all matching CSPF-groups to TE metric of TE link.
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint	<cspf-interface-constraint />	Uses interface IP address for CSPF computation.
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down	<handle-isis-neighbor-down />	Configures MPLS to handle ISIS neighbor down event.
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down	<handle-ospf-neighbor-down />	Configures MPLS to handle OSPF neighbor down event.
<base_URI>/config/running/router/mpls/policy/retry-time	<retry-time>{uint32}</retry-time>	Configures LSP retry time.
<base_URI>/config/running/router/mpls/policy/retry-limit	<retry-limit>{uint32}</retry-limit>	Configures LSP retry limit.
<base_URI>/config/running/router/mpls/policy/rapid-retry	<rapid-retry>{enable-disable}</rapid-retry>	Configures Rapid retry.
<base_URI>/config/running/router/mpls/policy/rsvp-periodic-flooding-time	<rsvp-periodic-flooding-time>{uint32}</rsvp-periodic-flooding-time>	Sets the interval for RSVP TE periodic flooding.
<base_URI>/config/running/router/mpls/policy/soft-preemption/cleanup-time	<cleanup-timer>{uint32}</cleanup-timer>	Defines timer value for soft preemption to happen.
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	<all><isis>{enumeration}</isis></all>	Configures traffic engineering parameters.

PUT URIs	Payload	Description
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	<auto-bandwidth-adjustment><isis>{enumeration}</isis></auto-bandwidth-adjustment>	Configures auto-bandwidth-adjustment parameters.
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis	<lsp-reoptimize-timer><isis>{enumeration}</isis></lsp-reoptimize-timer>	Configure Reoptimization timer.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	<ospf-area-as-ip-address><qos-ttl-mode>{enumeration}</qos-ttl-mode></ospf-area-as-ip-address>	MPLS TTL and QoS propagation model.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	<ospf-area-as-decimal><qos-ttl-mode>{enumeration}</qos-ttl-mode></ospf-area-as-decimal>	Configures OSPF area as decimal.
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode	<all><qos-ttl-mode>{enumeration}</qos-ttl-mode></all>	Configures MPLS ttl and qos propagation model.
<base_URI>/config/running/router/mpls/policy/ingress-tunnel-accounting	<ingress-tunnel-accounting />	Enables Traffic Statistics for Tunnels.
<base_URI>/config/running/router/mpls/policy/transit-session-accounting	<transit-session-accounting />	Enables Traffic Statistics for transit sessions.
<base_URI>/config/running/router/mpls/policy/auto-bandwidth	<auto-bandwidth />	Configures auto-bandwidth
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/sample-interval	<sample-interval>{uint32}</sample-interval>	Sets sample interval: the time after which the traffic rate is sampled.
<base_URI>/config/running/router/mpls/policy/implicit-commit/auto-bandwidth-adjustment	<auto-bandwidth-adjustment>true</auto-bandwidth-adjustment>	Enables auto-bandwidth adjustment.

DELETE URIs
<base_URI>/config/running/router/mpls/policy
<base_URI>/config/running/router/mpls/policy/admin-group/{admin-group-name};{admin-group-number}
<base_URI>/config/running/router/mpls/policy/backup-retry-time
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/ignore-overload-bit
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/metric-type
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-metric
<base_URI>/config/running/router/mpls/policy/cspf-computation-mode/use-bypass-liberal
<base_URI>/config/running/router/mpls/policy/cspf-group-computation/add-penalty
<base_URI>/config/running/router/mpls/policy/cspf-interface-constraint
<base_URI>/config/running/router/mpls/policy/handle-isis-neighbor-down
<base_URI>/config/running/router/mpls/policy/handle-ospf-neighbor-down
<base_URI>/config/running/router/mpls/policy/retry-time
<base_URI>/config/running/router/mpls/policy/retry-limit
<base_URI>/config/running/router/mpls/policy/rapid-retry
<base_URI>/config/running/router/mpls/policy/rsvp-periodic-flooding-time
<base_URI>/config/running/router/mpls/policy/up
<base_URI>/config/running/router/mpls/policy/soft-preemption/cleanup-timer
<base_URI>/config/running/router/mpls/policy/traffic-engineering/isis
<base_URI>/config/running/router/mpls/policy/qos-ttl-mode
<base_URI>/config/running/router/mpls/policy/ingress-tunnel-accounting

DELETE URIs
<base_URI>/config/running/router/mpls/policy/transit-session-accounting
<base_URI>/config/running/router/mpls/policy/auto-bandwidth
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/num-sample-record
<base_URI>/config/running/router/mpls/policy/auto-bandwidth/sample-interval

## Parameters

### *admin-group-name*

Sets administrative group name.

### *admin-group-number*

Admin-group number {range 0-31}.

### *backup-retry-time*

Specifies the backup retry time. Range is from 10 to 600.

### *metric-type*

Specifies the metric type for CSPF computation. Valid values are 1 or 2. To use IGP metric of the link for CSPF computation configure **1** and to use TE metric of the link for CSPF computation configure **2**.

### *retry-time*

Specifies the LSP retry time. The range is from 1 to 600. The default value is 30.

### *retry-limit*

Specifies the LSP retry limit. The range is from 0 to 8192. The default value is 65535.

### *rapid-retry*

Enables or disables Rapid retry.

### *rsvp-periodic-flooding-time*

Specifies the MPLS TE Periodic Flooding Timer in seconds. Valid values are 0 or between 30 to 3600.

### *cleanup-timer*

Specifies the Soft preemption cleanup-timer in seconds. Valid values are 0 or between 30 to 300. The default is 30.

### *lsp-reoptimize-timer*

Specifies LSP reoptimize timer. The range is from 30 to 65535.

### *ospf-area-as-ip-address*

Specifies the OSPF area as IPv4 address.

### *ospf-area-as-decimal*

Specifies OSPF area as a decimal. The range is from 0 to 2147483647.

## Usage Guidelines

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



## Examples

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

### URI

http://host:80/rest/config/running/running/router/mpls/policy

### Request Body

None

### Response Body

```
<policy xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/mpls/policy">
  <cspf-computation-mode y:self="/rest/config/running/router/mpls/policy/cspf-computation-mode">
    </cspf-computation-mode>
  <cspf-group-computation y:self="/rest/config/running/router/mpls/policy/cspf-group-computation">
    </cspf-group-computation>
  <rsvp-flooding-threshold y:self="/rest/config/running/router/mpls/policy/rsvp-flooding-threshold">
    </rsvp-flooding-threshold>
  <soft-preemption y:self="/rest/config/running/router/mpls/policy/soft-preemption">
    </soft-preemption>
  <implicit-commit y:self="/rest/config/running/router/mpls/policy/implicit-commit">
    </implicit-commit>
  <traffic-engineering y:self="/rest/config/running/router/mpls/policy/traffic-engineering">
    <ospf y:self="/rest/config/running/router/mpls/policy/traffic-engineering/ospf">
      <area y:self="/rest/config/running/router/mpls/policy/traffic-engineering/ospf/area">
        </area>
      </ospf>
    </traffic-engineering>
  </policy>
```

The following example uses the POST option to configure MPLS policy.

### URI

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

### Request Body

```
<policy/>
```

### Response Body

None

The following example uses the DELETE option to remove the MPLS policy configuration.

### **URI**

http://host:80/rest/config/running/router/mpls/policy

### **Request Body**

None

### **Response Body**

None

## **History**

Release version	History
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include auto-bandwidth and cspf-computation-mode Bypass URIs.

# router/mpls/rsvp

Configures MPLS RSVP.

## Resource URIs

URI	Description
<BASE_URI>/config/running/router/mpls/rsvp	Enters MPLS RSVP configuration mode.

Following are the supported URIs.

GET URIs	Description
<BASE_URI>/config/running/router/mpls/rsvp	MPLS RSVP configuration.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-interval	RSVP Refresh interval.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-multiple	RSVP Refresh multiple.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/summary-refresh	Refresh Reduction Summary Refresh feature.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/bundle-message	Refresh Reduction bundle messaging feature.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/bundle-message/bundle-send-delay	Configures bundle send delay value.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging	RSVP Reliable messaging globally.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retrans-decay	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retrans-interval	Interval for an unacknowledged message to be resent.
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retry-limit	Maximum number of retries for an unacknowledged message.
<BASE_URI>/config/running/router/mpls/rsvp/hello	Enable RSVP Hello on all RSVP interfaces.
<BASE_URI>/config/running/router/mpls/rsvp/hello/interval	Interval between two RSVP Hello requests.
<BASE_URI>/config/running/router/mpls/rsvp/hello/tolerance	Number of unacknowledged RSVP Hello requests before timeout.
<BASE_URI>/config/running/router/mpls/rsvp/hello-acknowledgements	Acknowledge RSVP Hellos on interfaces supporting RSVP Hello and not having RSVP sessions.
<BASE_URI>/config/running/router/mpls/rsvp/backup-bw-guarantee	Setup a backup path requesting bandwidth only if bandwidth is available.

POST URIs	Payload	Description
<BASE_URI>/config/running/router/mpls	<rsvp />	Enters MPLS RSVP configuration mode.
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction	<bundle-message />	Refresh Reduction bundle messaging feature.
<BASE_URI>/config/running/router/mpls/rsvp	<reliable-messaging />	Configure RSVP Reliable messaging globally.
<BASE_URI>/config/running/router/mpls/rsvp	<hello />	Enable RSVP Hello on all RSVP interfaces.

PATCH URIs	Payload	Description
<BASE_URI>/config/running/router/mps/rsvp/refresh-interval	<refresh-interval>{uint32}</refresh-interval>	RSVP Refresh interval.
<BASE_URI>/config/running/router/mps/rsvp/refresh-multiple	<refresh-multiple>{uint32}</refresh-multiple>	RSVP Refresh multiple.
<BASE_URI>/config/running/router/mps/rsvp/refresh-reduction/summary-refresh	<summary-refresh />	Refresh Reduction Summary Refresh feature.
<BASE_URI>/config/running/router/mps/rsvp/refresh-reduction/bundle-message/bundle-send-delay	<bundle-send-delay>{uint32}</bundle-send-delay>	Configure bundle send delay value.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retrans-decay	<rapid-retrans-decay>{uint32}</rapid-retrans-decay>	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retrans-interval	<rapid-retrans-interval>{uint32}</rapid-retrans-interval>	Interval for an unacknowledged message to be resent.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retry-limit	<rapid-retry-limit>{uint32}</rapid-retry-limit>	Maximum number of retries for an unacknowledged message.
<BASE_URI>/config/running/router/mps/rsvp/hello/interval	<interval>{uint32}</interval>	Interval between two RSVP Hello requests.
<BASE_URI>/config/running/router/mps/rsvp/hello/tolerance	<tolerance>{uint32}</tolerance>	Number of unacknowledged RSVP Hello requests before timeout.
<BASE_URI>/config/running/router/mps/rsvp/hello-acknowledgements	<hello-acknowledgements />	Acknowledge RSVP Hellos on interfaces supporting RSVP Hello and not having RSVP sessions.
<BASE_URI>/config/running/router/mps/rsvp/backup-bw-guarantee	<backup-bw-guarantee />	Setup a backup path requesting bandwidth only if bandwidth is available.

PUT URIs	Payload	Description
<BASE_URI>/config/running/router/mps/rsvp/refresh-interval	<refresh-interval>{uint32}</refresh-interval>	Configure RSVP Refresh interval.
<BASE_URI>/config/running/router/mps/rsvp/refresh-multiple	<refresh-multiple>{uint32}</refresh-multiple>	Configure RSVP Refresh multiple.
<BASE_URI>/config/running/router/mps/rsvp/refresh-reduction/summary-refresh	<summary-refresh />	Refresh Reduction Summary Refresh feature.
<BASE_URI>/config/running/router/mps/rsvp/refresh-reduction/bundle-message/bundle-send-delay	<bundle-send-delay>{uint32}</bundle-send-delay>	Configure bundle send delay value.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retrans-decay	<rapid-retrans-decay>{uint32}</rapid-retrans-decay>	Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retrans-interval	<rapid-retrans-interval>{uint32}</rapid-retrans-interval>	Interval for an unacknowledged message to be resent.
<BASE_URI>/config/running/router/mps/rsvp/reliable-messaging/rapid-retry-limit	<rapid-retry-limit>{uint32}</rapid-retry-limit>	Maximum number of retries for an unacknowledged message.
<BASE_URI>/config/running/router/mps/rsvp/hello/interval	<interval>{uint32}</interval>	Interval between two RSVP Hello requests.
<BASE_URI>/config/running/router/mps/rsvp/hello/tolerance	<tolerance>{uint32}</tolerance>	Number of unacknowledged RSVP Hello requests before timeout.

PUT URIs	Payload	Description
<BASE_URI>/config/running/router/mpls/rsvp/hello-acknowledgements	<hello-acknowledgements />	Acknowledge RSVP Hellos on interfaces supporting RSVP Hello and not having RSVP sessions.
<BASE_URI>/config/running/router/mpls/rsvp/backup-bw-guarantee	<backup-bw-guarantee />	Setup a backup path requesting bandwidth only if bandwidth is available.

DELETE URIs
<BASE_URI>/config/running/router/mpls/rsvp
<BASE_URI>/config/running/router/mpls/rsvp/refresh-interval
<BASE_URI>/config/running/router/mpls/rsvp/refresh-multiple
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/summary-refresh
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/bundle-message
<BASE_URI>/config/running/router/mpls/rsvp/refresh-reduction/bundle-message/bundle-send-delay
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retrans-decay
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retrans-interval
<BASE_URI>/config/running/router/mpls/rsvp/reliable-messaging/rapid-retry-limit
<BASE_URI>/config/running/router/mpls/rsvp/hello
<BASE_URI>/config/running/router/mpls/rsvp/hello/interval
<BASE_URI>/config/running/router/mpls/rsvp/hello/tolerance
<BASE_URI>/config/running/router/mpls/rsvp/hello-acknowledgements
<BASE_URI>/config/running/router/mpls/rsvp/backup-bw-guarantee

## Parameters

### *refresh-interval*

Configure RSVP Refresh interval. The valid range is from 1 to 360. The default is 30.

### *refresh-multiple*

Configure RSVP Refresh multiple. The range is from 1 to 255. The default is 3.

### *bundle-send-delay*

Configure bundle send delay value. The valid range is from 20 to 1000. The default is 40.

### *rapid-retrans-decay*

Percentage increase in the rapid retransmission interval for each consecutive unacknowledged RSVP message. The valid range is from 0 to 100. The default is 100.

### *rapid-retrans-interval*

Interval for an unacknowledged message to be resent. The valid range is from 100 to 3000. The default is 2000.

### *rapid-retry-limit*

Maximum number of retries for an unacknowledged message. The valid range is from 1 to 16. The default is 5.

### *interval*

Interval between two RSVP Hello requests. The valid range is from 1 to 60. The default is 9.

### *tolerance*

Number of unacknowledged RSVP Hello requests before timeout. The valid range is from 1 to 255. The default is 3.

## Usage Guidelines

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

## Examples

The following example uses the GET option

### *URI*

http://host:80/rest/config/running/router/mpls/rsvp

### *Request Body*

None

### *Response Body*

```
<rsvp xmlns="urn:brocade.com:mgmt:brocade-mpls" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/router/mpls/rsvp">
  <refresh-reduction y:self="/rest/config/running/router/mpls/rsvp/refresh-reduction">
    </refresh-reduction>
  </rsvp>
```

The following example uses the POST option to configure MPLS RSVP.

### *URI*

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

### *Request Body*

```
<rsvp/>
```

### *Response Body*

None

The following example uses the DELETE option to remove the MPLS RSVP configuration.

### *URI*

http://host:80/rest/config/running/router/mpls/rsvp

### *Request Body*

None

### *Response Body*

None

## History

Release version	History
16r.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}/redistribute/isis	Redistributes IS-IS routes.
<base_URI>/config/running/router/ospf/{vrf-name}/redistribute/isis/route-map	Redistribute IS-IS 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}/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.



GET URIs	Description
<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.
<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).

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.
<base_URI>/config/running/router/ospf/{vrf-name)/redistribute	<redistribute><isis><level-1></level-1></isis></redistribute>	Enables ISIS 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).

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.
<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.

PUT URIs	Payload	Description
<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/default-vrf/redistribute	<redistribute><isis><level-1></level-1></isis></redistribute>	Enables ISIS 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.

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

## 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).

## 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/router/ospf/vrf/(vrf-name)

### 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/router/ospf/default-vrf">
  <vrf>default-vrf</vrf>
  <database-overflow-interval>111</database-overflow-interval>
  <default-information-originate y:self="/rest/config/running/router/ospf/default-vrf/default-
information-originate">
    </default-information-originate>
  <default-passive-interface>true</default-passive-interface>
  <default-metric>555</default-metric>
  <ldp-sync y:self="/rest/config/running/router/ospf/default-vrf/ldp-sync">
    </ldp-sync>
  <external-lsdb-limit>444</external-lsdb-limit>
  <log y:self="/rest/config/running/router/ospf/default-vrf/log">
    <all>true</all>
  </log>
  <neighbor y:self="/rest/config/running/router/ospf/default-vrf/neighbor/1.1.1.1">
    <neighbor-addr>1.1.1.1</neighbor-addr>
  </neighbor>
  <redistribute y:self="/rest/config/running/router/ospf/default-vrf/redistribute">
    <connected y:self="/rest/config/running/router/ospf/default-vrf/redistribute/connected">
      </connected>
    <static y:self="/rest/config/running/router/ospf/default-vrf/redistribute/static">
      </static>
    <bgp y:self="/rest/config/running/router/ospf/default-vrf/redistribute/bgp">
      </bgp>
    <ospf y:self="/rest/config/running/router/ospf/default-vrf/redistribute/ospf">
      </ospf>
    <isis y:self="/rest/config/running/router/ospf/default-vrf/redistribute/isis">
      </isis>
    </redistribute>
  <rfc1583-compatibility y:self="/rest/config/running/router/ospf/default-vrf/rfc1583-compatibility">
    <rfc1583-compatibility-flag>true</rfc1583-compatibility-flag>
  </rfc1583-compatibility>
  <area y:self="/rest/config/running/router/ospf/default-vrf/area/0">
    <area-id>0</area-id>
    <normal>true</normal>
    <nssa y:self="/rest/config/running/router/ospf/default-vrf/area/0/nssa">
      </nssa>
    <stub y:self="/rest/config/running/router/ospf/default-vrf/area/0/stub">
      </stub>
    <prefix-list y:self="/rest/config/running/router/ospf/default-vrf/area/0/prefix-list">
      </prefix-list>
    </area>
  <area y:self="/rest/config/running/router/ospf/default-vrf/area/1">
    <area-id>1</area-id>
    <normal>true</normal>
    <nssa y:self="/rest/config/running/router/ospf/default-vrf/area/1/nssa">
      </nssa>
    <stub y:self="/rest/config/running/router/ospf/default-vrf/area/1/stub">
      </stub>
    <prefix-list y:self="/rest/config/running/router/ospf/default-vrf/area/1/prefix-list">
```

```

    <prefix-list>abcd</prefix-list>
    <in>true</in>
    <prefix-list>abcd</prefix-list>
    <out>true</out>
  </prefix-list>
</area>
<area y:self="/rest/config/running/router/ospf/default-vrf/area/2">
  <area-id>2</area-id>
  <nssa y:self="/rest/config/running/router/ospf/default-vrf/area/2/nssa">
    </nssa>
  <stub y:self="/rest/config/running/router/ospf/default-vrf/area/2/stub">
    <stub-value>11</stub-value>
  </stub>
  <prefix-list y:self="/rest/config/running/router/ospf/default-vrf/area/2/prefix-list">
    </prefix-list>
  </area>
<area y:self="/rest/config/running/router/ospf/default-vrf/area/3">
  <area-id>3</area-id>
  <nssa y:self="/rest/config/running/router/ospf/default-vrf/area/3/nssa">
    <nssa-value>22</nssa-value>
  </nssa>
  <stub y:self="/rest/config/running/router/ospf/default-vrf/area/3/stub">
    </stub>
  <prefix-list y:self="/rest/config/running/router/ospf/default-vrf/area/3/prefix-list">
    </prefix-list>
  </area>
<auto-cost y:self="/rest/config/running/router/ospf/default-vrf/auto-cost">
  <reference-bandwidth y:self="/rest/config/running/router/ospf/default-vrf/auto-cost/reference-
bandwidth">
    <ref-bandwidth>1000</ref-bandwidth>
    <use-active-ports>true</use-active-ports>
  </reference-bandwidth>
</auto-cost>
<distance y:self="/rest/config/running/router/ospf/default-vrf/distance/external">
  <route-type>external</route-type>
  <dist-value>50</dist-value>
</distance>
<distance y:self="/rest/config/running/router/ospf/default-vrf/distance/inter-area">
  <route-type>inter-area</route-type>
  <dist-value>61</dist-value>
</distance>
<distance y:self="/rest/config/running/router/ospf/default-vrf/distance/intra-area">
  <route-type>intra-area</route-type>
  <dist-value>72</dist-value>
</distance>
<distribute-list y:self="/rest/config/running/router/ospf/default-vrf/distribute-list">
  <route-map y:self="/rest/config/running/router/ospf/default-vrf/distribute-list/route-map">
    <route-map>afgh</route-map>
    <in>true</in>
  </route-map>
</distribute-list>
<max-metric y:self="/rest/config/running/router/ospf/default-vrf/max-metric">
  <router-lsa y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa">
    <external-lsa y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/external-
lsa">
      <external-lsa-val>16777214</external-lsa-val>
    </external-lsa>
    <summary-lsa y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/summary-
lsa">
      </summary-lsa>
      <link y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/link">
        <ptp>true</ptp>
        <stub>true</stub>
        <transit>true</transit>
      </link>
    <on-startup y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/on-
startup">
      <time>400</time>
      <external-lsa y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/on-
startup/external-lsa">
        </external-lsa>
      <summary-lsa y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/on-

```

```

startup/summary-lsa">
  </summary-lsa>
  <link y:self="/rest/config/running/router/ospf/default-vrf/max-metric/router-lsa/on-startup/
link">
    <transit>true</transit>
    </link>
  </on-startup>
</router-lsa>
</max-metric>
<summary-address y:self="/rest/config/running/router/ospf/default-vrf/summary-address/
12.0.0.0%2C255.0.0.0">
  <sum-address>12.0.0.0</sum-address>
  <sum-address-mask>255.0.0.0</sum-address-mask>
</summary-address>
<timers y:self="/rest/config/running/router/ospf/default-vrf/timers">
  <lsa-group-pacing>300</lsa-group-pacing>
  <throttle y:self="/rest/config/running/router/ospf/default-vrf/timers/throttle">
    <spf y:self="/rest/config/running/router/ospf/default-vrf/timers/throttle/spf">
      <init-delay>1000</init-delay>
      <hold-time>2000</hold-time>
      <max-hold-time>5000</max-hold-time>
    </spf>
  </throttle>
</timers>
<graceful-restart y:self="/rest/config/running/router/ospf/default-vrf/graceful-restart">
  <graceful-restart-enable>true</graceful-restart-enable>
</graceful-restart>
<maximum-paths>9</maximum-paths>
</ospf>

```

The following is an example of the POST operation to add a prefix-list to router OSPF area configuration.

## URI

http://host:80/rest/config/running/router/ospf/(vrf-name)/area/1/prefix-list

## Request Body

```
<prefix-list>prefixlist1</prefix-list>
```

## 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/(vrf-name)/area/1/prefix-list

## Request Body

None

## Response Body

None



## History

Release version	History
16r.1.00	This API call was introduced.

# router/pim

Retrieves basic global protocol-independent multicast (PIM) Sparse parameters on a device within the PIM Sparse domain.

## Resource URIs

URI	Description
<base_URI>/config/running/router/pim/	Configures basic global protocol-independent multicast (PIM) Sparse parameters on a device within the PIM Sparse domain.

GET URIs	Description
<base_URI>/config/running/router/pim/	Basic global protocol-independent multicast (PIM) Sparse parameters on a device within the PIM Sparse domain.
<base_URI>/config/running/router/pim/max-mc-cache	Maximum multicast cache size.
<base_URI>/config/running/router/pim/hello-interval	Sets the frequency with which the device sends PIM hello messages to its neighbors.
<base_URI>/config/running/router/pim/prune-wait	Configures the time interval to wait for an override before pruning.
<base_URI>/config/running/router/pim/nbr-timeout	Sets neighbor timeout.
<base_URI>/config/running/router/pim/inactivity-timer	Sets inactivity interval.
<base_URI>/config/running/router/pim/message-interval	Sets periodic join/prune message interval.
<base_URI>/config/running/router/pim/spt-threshold	Sets threshold for switching to shortest-path-tree.
<base_URI>/config/running/router/pim/rpf	Reverse path to the source.
<base_URI>/config/running/router/pim/rpf/ecmp	Multicast ECMP load sharing.
<base_URI>/config/running/router/pim/rpf/ecmp/rebalance	Multicast ECMP load sharing with dynamic rebalancing.
<base_URI>/config/running/router/pim/ssm-enable	Enables SSM mode for PIM.
<base_URI>/config/running/router/pim/ssm-enable/range	Sets the multicast address range to use for SSM.
<base_URI>/config/running/router/pim/bsr-candidate	Sets candidate bootstrap router.
<base_URI>/config/running/router/pim/rp-candidate	Configures candidate rendezvous point (RP).
<base_URI>/config/running/router/pim/anycast-rp	Sets Anycast RP address and peers.
<base_URI>/config/running/router/pim/rp-address	Configures a device interface as a rendezvous point (RP).
<base_URI>/config/running/router/pim/rp-address/{IP-address}/prefix-list	Configures a device as a candidate rendezvous point (RP) for all multicast groups with the prefix 224.0.0.0/4, by default, and explicitly adds or deletes groups with other prefixes.
<base_URI>/config/running/router/pim/route-precedence	Specifies Route Selection criteria.

## 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/router/pim

### Request Body

None

### Response Body

```
<pim xmlns="urn:brocade.com:mgmt:brocade-pim" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running/router/pim">
  <max-mcache>24000</max-mcache>
  <hello-interval>10</hello-interval>
  <prune-wait>10</prune-wait>
  <message-interval>30</message-interval>
  <spt-threshold>0</spt-threshold>
  <rpf y:self="/rest/config/running/router/pim/rpf">
    <ecmp y:self="/rest/config/running/router/pim/rpf/ecmp">
      <rebalance>true</rebalance>
    </ecmp>
  </rpf>
  <bsr-candidate y:self="/rest/config/running/router/pim/bsr-candidate">
    <interface y:self="/rest/config/running/router/pim/bsr-candidate/interface/loopback%2C3">
      <bsr-cand-intf-type>loopback</bsr-cand-intf-type>
      <bsr-cand-intf-id>3</bsr-cand-intf-id>
    </interface>
  </bsr-candidate>
  <rp-candidate y:self="/rest/config/running/router/pim/rp-candidate">
    <interface y:self="/rest/config/running/router/pim/rp-candidate/interface/loopback%2C3">
      <rp-cand-intf-type>loopback</rp-cand-intf-type>
      <rp-cand-intf-id>3</rp-cand-intf-id>
    </interface>
    <prefix y:self="/rest/config/running/router/pim/rp-candidate/prefix/pre1">
      <rp-cand-prefix-name>pre1</rp-cand-prefix-name>
    </prefix>
  </rp-candidate>
  <anycast-rp y:self="/rest/config/running/router/pim/anycast-rp/1.1.1.1">
    <anycast-ip-addr>1.1.1.1</anycast-ip-addr>
  </anycast-rp>
  <rp-address y:self="/rest/config/running/router/pim/rp-address/135.135.135.135">
    <rp-ip-addr>135.135.135.135</rp-ip-addr>
  </rp-address>
  <route-precedence y:self="/rest/config/running/router/pim/route-precedence">
    <uc-default>true</uc-default>
    <uc-non-default>true</uc-non-default>
  </route-precedence>
</pim>
```

## History

Release version	History
16r.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
16r.1.00	This API call was introduced.

# rule/{rule-name}/action

Creates role-based access permissions (RBAC) 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 switch obtains its configuration from the principal node. Enabling this feature solves most node-segmentation issues.



## Examples

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
7.1.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

# rule/{rule-name}/command/show running-config

Displays the running-config rule for a user.

## Resource URIs

URI	Description
<base_URI>/config/running/rule/{rule-name}/command/ show running-config	Displays the running-config rule.

## 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 switch obtains its configuration from the principal node. Enabling this feature solves most node-segmentation issues.

## Examples

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

### URI

http://host:80/config/runnin//rule/{rule-name}/command/ show running-config

### 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 rule .

### URI

http://host:80/rest/config/running/rule/{rule-name}/command/ show running-config

### Request Body

```
<rule>
  <index>5</index>
  <command>
    <show>
      <running-config>
        </running-config>
      </show>
    </command>
  </rule>
```

### Response Body

None

The following example uses the DELETE option to delete the rule.

### URI

http://host:80/rest/config/running/rule/{rule-name}

### Request Body

None

### Response Body

None

## History

Release version	History
7.1.0	This API call was introduced.

Release version	History
16r.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	Retrieves sFlow configuration.
<base_URI>/config/running/sflow/agent-address	Retrieves sFlow agent-ID address.
<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.

PUT URIs	Payload	Description
<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 2 through 16777215. The default value is 32768.

## 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="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
16r.1.00	This API call was introduced.
17r.2.00	This API call was modified to include the <b>sflow agent-address</b>

# system-monitor

Configures, modifies, or retrieves 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/linecard	Retrieves threshold and alert setting for component: LINECARD.
<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.

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor/cid-card/alert/state	<state>removed</state>	Configures alerts for CID crash state.
<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/LineCard/threshold/marginal-threshold	<marginal-threshold>(unit32)</marginal-threshold>	Configures minimum number contributing to MARGINAL state of LineCard.
<base_URI>/config/running/system-monitor/LineCard/threshold/down-threshold	<down-threshold>(unit32)</down-threshold>	Configures minimum number contributing to DOWN state of the LineCard.
<base_URI>/config/running/system-monitor/LineCard/alert/state	<state>inserted</state>	Configures alerts for LineCard state.
<base_URI>/config/running/system-monitor/LineCard/alert/action	<action>raslog</action>	Configure action to be taken.
<base_URI>/config/running/system-monitor/port	<port />	Configures Port CRC Monitoring.
<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.

#### **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.

#### **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>3</marginal-threshold>
      <down-threshold>4</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>0</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/system-monitor/cid-card/alert">
      <state>removed</state>
      <action>raslog</action>
    </alert>
  </cid-card>
  <sfp y:self="/rest/config/running/system-monitor/sfp">
    <alert y:self="/rest/config/running/system-monitor/sfp/alert">
      <state>none</state>
      <action>none</action>
    </alert>
  </sfp>
  <compact-flash y:self="/rest/config/running/system-monitor/compact-flash">
    <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>0</down-threshold>
    </threshold>
    <alert y:self="/rest/config/running/system-monitor/LineCard/alert">
      <state>removed</state>
      <action>raslog</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>0</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
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include payload for PATCH port URI.

# system-monitor/tm

Configures, modifies, or retrieves Transient Buffer Congestion Detection settings.

## Resource URIs

GET URIs	Description
<base_URI>/config/running/system-monitor/tm/discard-packet/threshold	Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-packet/logging-interval	Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/threshold	Traffic Manager VOQ discarded packets
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/logging-interval	Traffic Manager VOQ discarded packets
<base_URI>/config/running/system-monitor/tm/delete-packet/threshold	Traffic Manager VOQ deleted packet monitoring
<base_URI>/config/running/system-monitor/tm/delete-packet/logging-interval	Traffic Manager VOQ deleted packet monitoring

PUT URIs	Payload	Description
<base_URI>/config/running/system-monitor/tm/discard-packet/threshold	<threshold>{uint32}</threshold>	Sets threshold for Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-packet/logging-interval	<logging-interval>{uint16}</logging-interval>	Sets logging interval for Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/threshold	<threshold>{uint32}</threshold>	Sets threshold for Traffic Manager VOQ discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/logging-interval	<logging-interval>{uint16}</logging-interval>	Sets logging interval for Traffic Manager VOQ discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/delete-packet/threshold	<threshold>{uint32}</threshold>	Sets threshold for Traffic Manager deleted packet monitoring.
<base_URI>/config/running/system-monitor/tm/delete-packet/logging-interval	<logging-interval>{uint16}</logging-interval>	Sets logging interval for Traffic Manager deleted packet monitoring.

PATCH URIs	Payload	Description
<base_URI>/config/running/system-monitor/tm/discard-packet	<discard-packet><threshold>{uint32}</threshold></discard-packet>	Sets threshold for Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-packet	<discard-packet><logging-interval>{uint16}</logging-interval></discard-packet>	Sets logging interval for Traffic Manager discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet	<discard-voq-packet><threshold>{uint32}</threshold></discard-voq-packet>	Sets threshold for Traffic Manager VOQ discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/discard-voq-packet	<discard-voq-packet><logging-interval>{uint16}</logging-interval></discard-voq-packet>	Sets logging interval for Traffic Manager VOQ discard packet monitoring.
<base_URI>/config/running/system-monitor/tm/delete-packet	<delete-packet><threshold>{uint32}</threshold></delete-packet>	Sets threshold for Traffic Manager deleted packet monitoring.
<base_URI>/config/running/system-monitor/tm/delete-packet	<delete-packet><logging-interval>{uint16}</logging-interval></delete-packet>	Sets logging interval for Traffic Manager deleted packet monitoring.

DELETE URIs
<base_URI>/config/running/system-monitor/tm/discard-packet/threshold
<base_URI>/config/running/system-monitor/tm/discard-packet/logging-interval
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/threshold
<base_URI>/config/running/system-monitor/tm/discard-voq-packet/logging-interval
<base_URI>/config/running/system-monitor/tm/delete-packet/threshold
<base_URI>/config/running/system-monitor/tm/delete-packet/logging-interval

## Parameters

### *threshold*

The threshold limit for discard packet count. Setting the threshold limit to '0' disables monitoring.

### *logging-interval*

Specifies the set the time interval at which RASLOG is recorded if discard count threshold limit is reached. Default is 60 minutes. VOQ logging interval is adjusted to nearest multiple of 4.

## 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/system-monitor/tm/discard-packet/threshold

### *Request Body*

None

### *Response Body*

```
<threshold xmlns="urn:brocade.com:mgmt:brocade-system-monitor" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/system-monitor/tm/discard-packet/threshold">14</threshold>
```



The following example uses the PUT option .

### **URI**

http://host:80/rest/config/running/system-monitor/tm/discard-packet/threshold

### **Request Body**

```
<threshold>14</threshold>
```

### **Response Body**

None

The following example uses the DELETE option .

### **URI**

http://host:80/rest/config/running/system-monitor/tm/discard-packet/threshold

### **Request Body**

None

### **Response Body**

None

## History

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

# system-monitor-mail

Configures, modifies, or retrieves 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. 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
/rest/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
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

# system-monitor-mail/fru

Configures, modifies, or retrieves 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
/rest/config/running/system-monitor-mail/fru	<email-list><email>(string)</email></email-list>	Configures email alerts for the FRUs.

PUT URI	Payload	Description
/rest/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 y:self="/rest/config/running/system-monitor-mail/fru">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/fru/email-list/abc@brocade.com">
    <email>abc@brocade.com</email>
  </email-list>
</fru>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.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
/rest/config/running/system-monitor-mail/interface	<email-list><email>(string)</email></email-list>	Configures email address for interface.

PUT URI	Payload	Description
/rest/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 y:self="/rest/config/running/system-monitor-mail/interface">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/interface/email-list/abc1@brocade.com">
    <email>abc1@brocade.com</email>
  </email-list>
</interface>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.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 y:self="/rest/config/running/system-monitor-mail/relay/10.20.38.100">
  <host-ip>10.20.38.100</host-ip>
  <domain-name>domain1</domain-name>
</relay>
```



The following is an example of the POST operation to configure the relay host for e-mail to work in a non-DNS environment.

### URI

http://host:80/rest/config/running/system-monitor-mail

### Request Body

```
<relay>
  <host-ip>10.20.38.120</host-ip>
  <domain-name>domain1</domain-name>
</relay>
```

### Response Body

None

## History

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.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
/rest/config/running/system-monitor-mail/security	<email-list><email>(string)</email></email-list>	Configures the security email alerts.

PUT URIs	Payload	Description
/rest/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 y:self="/rest/config/running/system-monitor-mail/security">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/security/email-list/abc@brocade.com">
    <email>abc@brocade.com</email>
  </email-list>
</security>
```

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
5.0.0	This API call was introduced.

Release version	History
16r.1.00	This API call was introduced.

# system-monitor-mail/sfp

Configures, modifies, or retrieves 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
/rest/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
/rest/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 y:self="/rest/config/running/system-monitor-mail/sfp">
  <enable>true</enable>
  <email-list y:self="/rest/config/running/system-monitor-mail/sfp/email-list/abc1@brocade.com">
    <email>abc1@brocade.com</email>
  </email-list>
</sfp>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	History
16r.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
5.0.0	This API call was introduced.
7.0.0	The API call was modified to include the parameter <i>use-vrf</i> .

Release version	History
16r.1.00	This API call was introduced.



# topology-group

Configures topology VLAN group for L2 protocols.

## Resource URIs

URI	Description
<base_URI>/config/running/topology-group	Configures topology vlan group for L2 protocols.

GET URIs	Description
<base_URI>/config/running/topology-group	Retrieves topology group configuration details.
<base_URI>/config/running/topology-group/{group-id}	Retrieves information for a particular topology group.
<base_URI>/config/running/topology-group/{group-id}/master-vlan	Retrieves information about master VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	Retrieves information about member VLAN.

POST URIs	Payload	Description
<base_URI>/config/running/topology-group	<topology-group><topology-group-id>(unit32)</topology-group-id></topology-group>	Configures topology group.

PATCH URIs	Payload	Description
<base_URI>/config/running/topology-group/{group-id}/master-vlan	<master-vlan>(unit32)</master-vlan>	Configures master VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	<member-vlan><add>(unit32)</add></member-vlan>	Adds member VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	<member-vlan><remove>(unit32)</remove></member-vlan>	Removes member VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan/remove	<remove>(unit32)</remove>	Removes member VLAN.

PUT URIs	Payload	Description
<base_URI>/config/running/topology-group/{group-id}/master-vlan	<master-vlan>(unit32)</master-vlan>	Configures master VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan	<member-vlan><add>(unit32)</add></member-vlan>	Adds member VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan/add	<add>(unit32)</add>	Removes member VLAN.
<base_URI>/config/running/topology-group/{group-id}/member-vlan/remove	<remove>(unit32)</remove>	Removes member VLAN.

DELETE URIs
<base_URI>/config/running/topology-group/{group-id}/master-vlan
<base_URI>/config/running/topology-group/{group-id}/member-vlan
<base_URI>/config/running/topology-group/{group-id}/member-vlan/add/{vlan-id}

## DELETE URIs

```
<base_URI>/config/running/topology-group/{group-id}/member-vlan/remove/{vlan-id}
```

## Parameters

*group-id*

Specifies topology group ID.

*member-vlan*

Configures member VLANs.

*master-vlan*

Configures master 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/topology-group
```

### Request Body

```
<topology-group>
  <topology-group-id>1</topology-group-id>
</topology-group>
```

### Response Body

None

The following example uses the DELETE option to remove Topology group master VLAN.

### URI

```
http://host:80/rest/config/running/topology-group/1/master-vlan
```

### Request Body

None

### Response Body

None

## History

Release version	History
16r.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 configuration 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>
  <password>"BwrsDbB+tABWGWpINOVKoQ==\n"</password>
  <encryption-level>7</encryption-level>
  <role>admin</role>
  <desc>Administrator</desc>
</username>
<username xmlns="urn:brocade.com:mgmt:brocade-aaa" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/
config/running/username/user1">
  <name>user1</name>
  <password>"Zzq31Rtf/++XZ3uIC1keMw==\n"</password>
  <encryption-level>7</encryption-level>
  <role>user</role>
  <desc>user1</desc>
  <expire>2016-06-06</expire>
  <access-time>1700</access-time>
  <to>1800</to>
</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
5.0.0	This API call was introduced.
7.0.1	Added these parameters: access-time and end-time.

username

Release version	History
16r.1.00	This API call was introduced.

# uda-access-list

Creates a user-defined ACL (UDA).

## Resource URIs

URI	Description
<base_URI>/config/running/uda	Creates a user-defined ACL.

GET URIs	Description
<base_URI>/config/running/interface/Ethernet/name/uda/access-group/	Applies rules in a user-defined ACL to traffic entering an interface.
<base_URI>/config/running/uda/access-list	Creates a user-defined ACL.
<base_URI>/config/running/running/uda-key/profile	Creates a user-defined ACL profile.
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp	Specifies the user-defined ACL offsets for a UDA profile.

POST URIs	Payload	Description
<base_URI>/config/running/uda/access-list	<uda-acl-name>	Creates a user-defined ACL (UDA).
<base_URI>config/running/uda/access-list/extended/%name%	<extended><name>{acl-name}</name></extended>	Creates an extended ACL. Extended ACLs contain rules that permit or deny traffic according to source and destination addresses.
<base_URI>config/running/interface/Ethernet/%name%/uda	<access-group> <uda-access-list> <uda-direction> <uda-acl-name> {enumeration} </uda-acl-name>	Creates an ACL name unique among all ACLs (Layer 2, Layer 3, and UDAs).
<base_URI>config/running/interface/Port-channel/%name%/uda	<access-group> <uda-access-list> <uda-direction> <uda-acl-name> {enumeration} </uda-acl-name>	Creates an ACL name .
<base_URI>config/running/uda-key	<uda-profile-name>	Creates the UDA key.

DELETE URIs
<base_URI>/config/running/uda/access-list/extended/%name%
<base_URI>/config/running/uda/access-list/extended/%name%/seq/%seq-id%
<base_URI>/interface/Ethernet/%name%/uda
<base_URI>/uda/access-group/%uda-access-list%/%uda-direction%
<base_URI>/config/running/interface/Port-channel/%name%/uda
<base_URI>/interface/Port-channel/%name%/uda/access-group/%uda-access-list%/%uda-direction%
<base_URI>/config/running/uda-key/profile/%name%
<base_URI>/config/running/interface/Ethernet/%name%/uda-profile-apply

## 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/running/uda-key/profile`

### *Request Body*

None

### *Response Body*

None

The following is an example of the POST operation.

### *URI*

`http://host:80/rest/config/running/uda/access-list`

### *Request Body*

None

### *Response Body*

None

The following is an example of the DELETE operation.

### *URI*

`http://host:80/rest/config/running/interface/Ethernet/%name%/uda-profile-apply`

### *Request Body*

None

### *Response Body*

None



## History

Release version	History
17r.2.00	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/pim	Configures IP PIM on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/pim/snooping	Configures IP PIM snooping on a VLAN.
<base_URI>/config/running/vlan/{vlan-num}/ip/pim/snooping/enable	Enables IP PIM snooping on a VLAN.
<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.

POST URIs	Payload	Description
<base_URI>/config/running/	<vlan><name>{uint32}</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}</interface><igmps-if-type>{enumeration}</igmps-if-type><value>{string-type}</value></static-group>	Configures an interface in a VLAN as a static member of a multicast group.

PUT URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-num}/router-interface/ve	<Ve>{uint32}</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/pim/snooping/enable	<enable>{enumeration}</enable>	Enables IP PIM snooping.
<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.

PATCH URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-num}/ip/pim/snooping	<snooping><enable>{enumeration}</enable></snooping>	Creates a VLAN.
<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.
<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.

DELETE URIs
<base_URI>/config/running/vlan/{vlan-num}/ip/pim/snooping/enable
<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/{igmps-interface-type},{interface-name}
<base_URI>/config/running/vlan/{vlan-num}/ip/igmp/snooping/static-group/{igmpl3-sg-addr}/interface/{igmps-interface-type},{interface-name}

## 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.

## 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
16r.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
5.0.0	This API call was introduced.



Release version	History
16r.1.00	This API call was introduced.

# vlan/{vlan-name}/loop-detection

Configures, modifies, or retrieves VLAN-mode Loop Detection configuration.

## Resource URIs

URI	Description
<base_URI>/config/running/vlan/{vlan-name}/loop-detection	Configures, modifies, or retrieves VLAN-mode Loop Detection status.

GET URIs	Description
<base_URI>/config/running/vlan/{vlan-name}/loop-detection	Displays VLAN-mode Loop Detection configuration details.

PATCH URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-name}	<vlan><loop-detection>true</loop-detection></vlan>	Enables Loop Protection at the VLAN level.

PUT URIs	Payload	Description
<base_URI>/config/running/vlan/{vlan-name}/loop-detection	<loop-detection>true</loop-detection>	Enables Loop Protection at the VLAN level.

## Parameters

*vlan-name*

Displays the administrative name of the VLAN.

## Usage Guidelines

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

## Examples

The following example uses the GET option to retrieve the loop detection status.

### URI

http://host:80/rest/config/running/vlan/40/loop-detection

### Request Body

None

### Response Body

```
<loop-detection xmlns="urn:brocade.com:mgmt:brocade-interface" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/config/running/vlan/40/loop-detection">true</loop-detection>
```

The following example uses the PUT option to enable loop detection.

### **URI**

http://host:80/rest/config/running/vlan/40/loop-detection

### **Request Body**

```
<loop-detection>true</loop-detection>
```

### **Response Body**

none

## History

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

# vlan/{vlan-name}/mac

Configures MAC access group.

## Resource URIs

URI	Description
http://host:80/rest/config/running/vlan/{vlan-name}/mac	Configures MAC access 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/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

## History

Release version	History
16r.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.
/config/running/vrf/{vrf-name}/rd	Configures route-distinguisher to identify a VRF.
/config/running/vrf/{vrf-name}/vpn-statistics	Enables VPN statistics for a VRF.
/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/import/map	Imports a map.
/config/running/vrf/{vrf-name}/address-family/ipv4/unicast/export/map	Exports a map.
<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 the route distinguisher.

DELETE URIs
<base_URI>/config/running/vrf/{vrf-name}/ip/router-id

DELETE URIs
<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

*vrf-name*

Specifies the VRF name.

*rd*

Specifies the ASN number.

*max-route*

Specifies the maximum number of routes.

*router-id*

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
17r.1.01	This API call was introduced.



# Operational-state APIs

## adj-neighbor-entries-state

Displays IS-IS neighbor information

### Resource URIs

URI	Description
<base_URI>/operational-state/adj-neighbor-entries-state	Displays IS-IS neighbors adjacencies.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor	Displays IS-IS specific neighbor adjacencies.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-state-change-time	Displays Adjacency State Change Time in Seconds.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-type	Displays Type of ISIS Adjacency.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-state	Displays Adjacency State.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/circuit-intf-name	Displays Circuit Interface Name.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/snpa	Displays Subnetwork Point of Attachment.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-holding-time	Displays Adjacency Holding Time.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-priority	Displays Adjacency Priority.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-3way-state	Displays Adjacency 3 Way Hand-Shaking State.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/host-name	Displays Host Name.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-lan-name	Displays Adjacency LAN Name.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-lan-id	Displays Adjacency LAN ID.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-p2p-circ-id	Displays Adjacency Point-to-Point Circuit ID.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-num-adds	Displays number of NSAPS/Areas Associated to the Adjacency.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-use	Displays Adjacency level Usage.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/ip-circuit-id	Displays ISIS IP Circuit ID.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-address	Displays IPv4 Circuit Address.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/ip6-circuit-id	Displays ISIS IPv6 Circuit ID.

URI	Description
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-ip6-address	Displays IPv6 Circuit Address.
<base_URI>/operational-state/adj-neighbor-entries-state/adj-neighbor/val_neighbor-id_val/adj-area	Displays Adjacency Area.

## 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/adj-neighbor-entries-state

### Request Body

None

### Response Body

```
<adj-neighbor-entries-state xmlns="urn:brocade.com:mgmt:brocade-isis-operational" y:self="/rest/operational-state/adj-neighbor-entries-state">
  <adj-neighbor y:self="/rest/operational-state/adj-neighbor-entries-state/adj-neighbor/IXIA1101">
    <neighbor-id>IXIA1101</neighbor-id>
    <adj-state-change-time>494</adj-state-change-time>
    <adj-type>is-adj-l2</adj-type>
    <adj-state>UP</adj-state>
    <circuit-intf-name>Eth 1/49</circuit-intf-name>
    <snpa>0000.65dd.c2f7</snpa>
    <adj-holding-time>30</adj-holding-time>
    <adj-priority>0</adj-priority>
    <adj-mtprot>adj-mtprot-unknow</adj-mtprot>
    <adj-prot>enum=11</adj-prot>
    <adj-3way-state>adj-3way-state-up</adj-3way-state>
    <adj-lan-name>Fusion1</adj-lan-name>
    <adj-lan-id>3</adj-lan-id>
    <adj-num-adds>6</adj-num-adds>
    <adj-use>level-1-2</adj-use>
    <ip-circuit-id>3</ip-circuit-id>
    <adj-address>140.140.140.2</adj-address>
    <ip6-circuit-id>3</ip6-circuit-id>
    <adj-ip6-address>fe80::200:65ff:fedd:c2f7</adj-ip6-address>
    <adj-area y:self="/rest/operational-state/adj-neighbor-entries-state/adj-neighbor/IXIA1101/adj-area/49.0001">
      <adj-asi-area-name>49.0001</adj-asi-area-name>
    </adj-area>
    <adj-area y:self="/rest/operational-state/adj-neighbor-entries-state/adj-neighbor/IXIA1101/adj-area/01">
      <adj-asi-area-name>01</adj-asi-area-name>
    </adj-area>
  </adj-neighbor>
  <adj-neighbor y:self="/rest/operational-state/adj-neighbor-entries-state/adj-neighbor/IXIA1101">
    <neighbor-id>IXIA1101</neighbor-id>
    <adj-state-change-time>496</adj-state-change-time>
    <adj-type>is-adj-l1</adj-type>
    <adj-state>UP</adj-state>
    <circuit-intf-name>Eth 1/49</circuit-intf-name>
    <snpa>0000.65dd.c2f7</snpa>
    <adj-holding-time>30</adj-holding-time>
    <adj-priority>0</adj-priority>
    <adj-mtprot>adj-mtprot-unknow</adj-mtprot>
    <adj-prot>enum=11</adj-prot>
    <adj-3way-state>adj-3way-state-up</adj-3way-state>
    <adj-lan-name>Fusion1</adj-lan-name>
    <adj-lan-id>3</adj-lan-id>
    <adj-num-adds>6</adj-num-adds>
    <adj-use>level-1-2</adj-use>
    <ip-circuit-id>3</ip-circuit-id>
    <adj-address>140.140.140.2</adj-address>
    <ip6-circuit-id>3</ip6-circuit-id>
    <adj-ip6-address>fe80::200:65ff:fedd:c2f7</adj-ip6-address>
```

adj-neighbor-entries-state

```
</adj-neighbor>  
</adj-neighbor-entries-state>
```

## History

Release version	History
16r.1.00	This API call was introduced.

# bd-vc-peer-state

Displays the VC peer state.

## Resource URIs

URI	Description
<base_URI> /rest/operational-state/bd-vc-peer-state	Displays the VC peer state.

## Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/bd-vc-peer-state

### Request Body

None

### Response Body

```
<bd-vc-peer-state xmlns="urn:brocade.com:mgmt:brocade-pwm-operational" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/operational-state/bd-vc-peer-state/1">
  <vc-id>1</vc-id>
  <bd-vc-peer-counter y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-counter">
    <no-of-peer-configured>1</no-of-peer-configured>
    <no-of-peer-operational>1</no-of-peer-operational>
  </bd-vc-peer-counter>
  <bd-vc-peer-data y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2">
    <vc-peer-address>4.4.3.2</vc-peer-address>
    <vc-peer-state>Operational</vc-peer-state>
    <vc-peer-uptime>"22 hr 35 min 20 sec"</vc-peer-uptime>
    <vc-peer-load-balance>true</vc-peer-load-balance>
    <vc-peer-cos-enabled>false</vc-peer-cos-enabled>
    <vc-peer-cos-value>0</vc-peer-cos-value>
    <vc-ldp-tnnl-in-use>"</vc-ldp-tnnl-in-use>
    <vc-local-label>983040</vc-local-label>
    <vc-remote-label>983093</vc-remote-label>
    <vc-local-mtu>1500</vc-local-mtu>
    <vc-remote-mtu>1500</vc-remote-mtu>
    <vc-local-type>4</vc-local-type>
    <vc-remote-type>4</vc-remote-type>
    <vc-proto-tnnl y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-proto-tnnl/rsvp">
      <vc-proto-name>rsvp</vc-proto-name>
      <vc-ldp-tunnel-id>0</vc-ldp-tunnel-id>
      <vc-ldp-name>"</vc-ldp-name>
      <vc-lsp-name>tor4_1</vc-lsp-name>
      <vc-peer-lsp-cos-enabled>false</vc-peer-lsp-cos-enabled>
      <vc-peer-lsp-cos-value>0</vc-peer-lsp-cos-value>
    </vc-proto-tnnl>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-assigned-lsp/tor4_1">
      <vc-lsp-name>tor4_1</vc-lsp-name>
    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-assigned-lsp/tor4_2">
      <vc-lsp-name>tor4_2</vc-lsp-name>
    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-assigned-lsp/tor4_3">
      <vc-lsp-name>tor4_3</vc-lsp-name>
    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-assigned-lsp/tor4_4">
      <vc-lsp-name>tor4_4</vc-lsp-name>
    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-assigned-lsp/tor4_5">
      <vc-lsp-name>tor4_5</vc-lsp-name>
    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-assigned-lsp/tor4_6">
      <vc-lsp-name>tor4_6</vc-lsp-name>
    </vc-assigned-lsp>
  </bd-vc-peer-data>
</bd-vc-peer-state>
```



```

    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-
assigned-lsp/tor4_7">
      <vc-lsp-name>tor4_7</vc-lsp-name>
    </vc-assigned-lsp>
    <vc-assigned-lsp y:self="/rest/operational-state/bd-vc-peer-state/1/bd-vc-peer-data/4.4.3.2/vc-
assigned-lsp/tor4_8">
      <vc-lsp-name>tor4_8</vc-lsp-name>
    </vc-assigned-lsp>
  </bd-vc-peer-data>
</bd-vc-peer-state>

```

## History

Release version	History
16r.1.00	This API call was introduced.

# 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
16r.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
16r.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
16r.1.00	This API call was introduced.

# cfm-state

Retrieves CFM information.

## Resource URIs

URI	Description
<base_URI>/rest/operational-state/cfm-state	Retrieves CFM operational information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail	Retrieves detailed CFM operations information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain	Retrieves CFM domain information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/md-level	Retrieves domain level information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma	Retrieves CFM MA details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/ma-idx	Retrieves MA index details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/ma-type	Retrieves MA type details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/ccm-interval	Retrieves CCM interval information.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/vlan-id	Retrieves VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/priority	Retrieves MA priority.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep	Retrieves MEP details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/mep-direction	Retrieves MEP direction.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/mep-mac	Retrieves MEP MAC.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/mep-port	Retrieves MEP port.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/port-state	Retrieves MEP port state TLV.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/rmep	Retrieves RMEP details.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/ rmep-mac	Retrieves RMETP MAC.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/vlan- id	Retrieves RMEP VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-detail/domain/ (domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/ rmep-state	Retrieves RMEP state.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity	Retrieves CFM connectivity details.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/ domain	Retrieves CFM domain details.

URI	Description
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/md-level	Retrieves domain level information.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma	Retrieves CFM MA details.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/ma-idx	Retrieves MA index information.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/ma-type	Retrieves MA type.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/ccm-interval	Retrieves CCM interval.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/vlan-id	Retrieves MA VLAN ID.
<base_URI>/operational-state/cfm-state/cfm-detail/domain/{md-name}/ma/{ma-name}/mep/{mep-id}/inner-vlan-id	Retrieves inner VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/priority	Retrieves priority.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep	Retrieves MEP information.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-direction	Retrieves MEP direction.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-mac	Retrieves MEP MAC.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/mep-port	Retrieves MEP port.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/port-state	Retrieves MEP port state TLV.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep-fail	Retrieves RMEP fail information.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/rmep-mac	Retrieves RMEP MAC.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/vlan-id	Retrieves RMEP VLAN ID.
<base_URI>/operational-state/cfm-state/cfm-detail/domain/{md-name}/ma/{ma-name}/mep/{mep-id}/rmep/{rmep-id}/inner-vlan-id	Retrieves inner VLAN ID.
<base_URI>/rest/operational-state/cfm-state/cfm-connectivity/domain/(domain-name)/ma/(ma-name)/mep/(mep-id)/rmep/(rmep-id)/rmep-state	Retrieves RMEP state.

## Usage Guidelines

Only GET operation is supported.



## Examples

### URI

http://host:80/rest/operational-state/cfm-state

### Request Body

None

### Response Body

```
<cfm-state xmlns="urn:brocade.com:mgmt:brocade-dotlag-operational" y:self="/rest/operational-state/cfm-state">
  <cfm-detail y:self="/rest/operational-state/cfm-state/cfm-detail">
    <domain y:self="/rest/operational-state/cfm-state/cfm-detail/domain/test">
      <md-name>test</md-name>
      <md-level>1</md-level>
      <ma y:self="/rest/operational-state/cfm-state/cfm-detail/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-detail/domain/test/ma/name/mep/1">
          <mep-id>1</mep-id>
          <mep-direction>mep-status-down</mep-direction>
          <mep-mac>768e.f809.e813</mep-mac>
          <mep-port>Eth 1/15</mep-port>
          <port-state>1</port-state>
          <rmep-fail>0</rmep-fail>
          <rmep-ok>0</rmep-ok>
        </mep>
      </ma>
    </domain>
  </cfm-detail>
  <cfm-connectivity y:self="/rest/operational-state/cfm-state/cfm-connectivity">
    <domain y:self="/rest/operational-state/cfm-state/cfm-connectivity/domain/test">
      <md-name>test</md-name>
      <md-level>1</md-level>
      <ma 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-down</mep-direction>
          <mep-mac>768e.f809.e813</mep-mac>
          <mep-port>Eth 1/15</mep-port>
          <port-state>1</port-state>
        </mep>
      </ma>
    </domain>
  </cfm-connectivity>
</cfm-state>
```

## History

Release version	History
16r.1.00	This API call was introduced.

# counts-state

Displays MCT operational information.

## Resource URIs

URI	Description
<base_URI>/operational-state/counts-state	Display IS-IS counters information
<base_URI>/operational-state/counts-state/areamis	Displays Area Mismatch count
<base_URI>/operational-state/counts-state/maxareamis	Displays Max Area Mismatch count
<base_URI>/operational-state/counts-state/badidlen	Displays System ID Length Mismatch count
<base_URI>/operational-state/counts-state/seqskip	Displays LSP Sequence Number Skipped count
<base_URI>/operational-state/counts-state/seqerr	Displays LSP Sequence error counts
<base_URI>/operational-state/counts-state/l1dbol	Displays Level-1 Database Overload count
<base_URI>/operational-state/counts-state/l2dbol	Displays Level-2 Database Overload count
<base_URI>/operational-state/counts-state/ownpurge	Displays Our LSP Purged count
<base_URI>/operational-state/counts-state/csnp-l1authfail	Displays CSNP Level-1 Auth Failures count
<base_URI>/operational-state/counts-state/csnp-l2authfail	Displays CSNP Level-2 Auth Failures count
<base_URI>/operational-state/counts-state/psnp-l1authfail	Displays PSNP Level-1 Auth Failures count
<base_URI>/operational-state/counts-state/psnp-l2authfail	Displays PSNP Level-2 Auth Failures count
<base_URI>/operational-state/counts-state/circ-l1authfail	Displays LSP Level-1 Auth Failures count
<base_URI>/operational-state/counts-state/circ-l2authfail	Displays LSP Level-2 Auth Failures count
<base_URI>/operational-state/counts-state/bad-lsp-log	Displays Bad LSP log
<base_URI>/operational-state/counts-state/bad-lsp-log/{type-index}/time-stamp	Displays Bad LSP time-stamp
<base_URI>/operational-state/counts-state/bad-lsp-log/{type-index}/l1-count	Displays Bad LSP l1 count
<base_URI>/operational-state/counts-state/bad-lsp-log/{type-index}/l2-count	Displays Bad LSP l2 count

## 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/counts-state

### Request Body

None

### Response Body

```
<counts-state xmlns="urn:brocade.com:mgmt:brocade-isis-operational" y:self="/rest/operational-state/counts-state">
  <areamis>0</areamis>
  <maxareamis>0</maxareamis>
  <badidlen>0</badidlen>
  <seqskip>2</seqskip>
  <seqerr>0</seqerr>
  <l1dbol>0</l1dbol>
  <l2dbol>0</l2dbol>
  <ownpurge>0</ownpurge>
  <csnp-11authfail>0</csnp-11authfail>
  <csnp-12authfail>0</csnp-12authfail>
  <psnp-11authfail>0</psnp-11authfail>
  <psnp-12authfail>0</psnp-12authfail>
  <circ-11authfail>0</circ-11authfail>
  <circ-12authfail>0</circ-12authfail>
  <bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/1">
    <type-index>1</type-index>
    <time-stamp>0</time-stamp>
    <l1-count>0</l1-count>
    <l2-count>0</l2-count>
  </bad-lsp-log>
  <bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/2">
    <type-index>2</type-index>
    <time-stamp>0</time-stamp>
    <l1-count>0</l1-count>
    <l2-count>0</l2-count>
  </bad-lsp-log>
  <bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/3">
    <type-index>3</type-index>
    <time-stamp>0</time-stamp>
    <l1-count>0</l1-count>
    <l2-count>0</l2-count>
  </bad-lsp-log>
  <bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/4">
    <type-index>4</type-index>
    <time-stamp>0</time-stamp>
    <l1-count>0</l1-count>
    <l2-count>0</l2-count>
  </bad-lsp-log>
  <bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/5">
    <type-index>5</type-index>
    <time-stamp>0</time-stamp>
    <l1-count>0</l1-count>
    <l2-count>0</l2-count>
  </bad-lsp-log>
  <bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/6">
    <type-index>6</type-index>
    <time-stamp>0</time-stamp>
    <l1-count>0</l1-count>
    <l2-count>0</l2-count>
  </bad-lsp-log>
</counts-state>
```

```

</bad-lsp-log>
<bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/7">
  <type-index>7</type-index>
  <time-stamp>0</time-stamp>
  <l1-count>0</l1-count>
  <l2-count>0</l2-count>
</bad-lsp-log>
<bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/8">
  <type-index>8</type-index>
  <time-stamp>0</time-stamp>
  <l1-count>0</l1-count>
  <l2-count>0</l2-count>
</bad-lsp-log>
<bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/9">
  <type-index>9</type-index>
  <time-stamp>0</time-stamp>
  <l1-count>0</l1-count>
  <l2-count>0</l2-count>
</bad-lsp-log>
<bad-lsp-log y:self="/rest/operational-state/counts-state/bad-lsp-log/10">
  <type-index>10</type-index>
  <time-stamp>0</time-stamp>
  <l1-count>0</l1-count>
  <l2-count>0</l2-count>
</bad-lsp-log>
</counts-state>

```

## History

Release version	History
16r.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	Displays the MCT client operational information.
<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-mem-vlan y:self="/rest/operational-state/mctd-client-state-state/show-cluster-mem-vlan/
56">
    <cluster-id>56</cluster-id>
    <num-vlans>2663</num-vlans>
    <vlan-label-info y:self="/rest/operational-state/mctd-client-state-state/show-cluster-mem-vlan/56/
vlan-label-info/2">
      <vlan-id>2</vlan-id>
      <mcast-label-local>817154</mcast-label-local>
      <mcast-label-remote>817154</mcast-label-remote>
    </vlan-label-info>
    <vlan-label-info y:self="/rest/operational-state/mctd-client-state-state/show-cluster-mem-vlan/56/
vlan-label-info/3">
      <vlan-id>3</vlan-id>
      <mcast-label-local>817155</mcast-label-local>
      <mcast-label-remote>817155</mcast-label-remote>
    </vlan-label-info>
    <vlan-label-info y:self="/rest/operational-state/mctd-client-state-state/show-cluster-mem-vlan/56/
vlan-label-info/4">
      <vlan-id>4</vlan-id>
      <mcast-label-local>817156</mcast-label-local>
      <mcast-label-remote>817156</mcast-label-remote>
    </vlan-label-info>
```

## History

Release version	History
16r.1.00	This API call was introduced.

# mct-l2ys-state

Displays the complete member-vlan information

## Resource URIs

URI	Description
<base_URI>/operational-state/mct-l2ys-state	Displays the complete member-vlan information
<base_URI>/operational-state/mct-l2ys-state/show-cluster-member-vlan	Displays the complete member-vlan information.
<base_URI>/operational-state/mct-l2ys-state/show-cluster-member-vlan/{cluster-id}/num-vlans	Displays the complete member-vlan information for specified cluster-id.

## 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-l2ys-state

### Request Body

None

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running">
<mct-l2ys-state xmlns="urn:brocade.com:mgmt:brocade-l2sys-operational" y:self="/rest/operational-state/mct-l2ys-state">
  <show-cluster-mem-vlan y:self="/rest/operational-state/mct-l2ys-state/show-cluster-mem-vlan/52">
    <cluster-id>52</cluster-id>
    <num-vlans>2663</num-vlans>
    <vlan-label-info y:self="/rest/operational-state/mct-l2ys-state/show-cluster-mem-vlan/52/vlan-label-info/2">
      <vlan-id>2</vlan-id>
      <unicast-label-local>800770</unicast-label-local>
      <unicast-label-remote>800770</unicast-label-remote>
      <fw-state>true</fw-state>
    </vlan-label-info>
    <vlan-label-info y:self="/rest/operational-state/mct-l2ys-state/show-cluster-mem-vlan/52/vlan-label-info/3">
      <vlan-id>3</vlan-id>
      <unicast-label-local>800771</unicast-label-local>
      <unicast-label-remote>0</unicast-label-remote>
      <fw-state>true</fw-state>
    </vlan-label-info>
  </show-cluster-mem-vlan>
</mct-l2ys-state>
</data>
```

## History

Release version	History
16r.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/show-cluster/{cluster-id}/client-info-list/{cluster-id},{client-id}/client-name	Displays the client-name information.
<base_URI>/operational-state/show-cluster/{cluster-id}/client-info-list/{cluster-id},{client-id}/client-interface	Displays the configured client-interface information.
<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

### *Request Body*

None

### *Response Body*

```
<mct-state xmlns="urn:brocade.com:mgmt:brocade-nsm-operational" y:self="/rest/operational-state/mct-state">  
</mct-state>
```

## History

Release version	History
16r.1.00	This API call was introduced.

# overlay-transit-state

Displays Vxlan transit information.

## Resource URIs

URI	Description
<base_URI>/operational-state/overlay-transit-state/{name}/binded-overlay-acl	Displays Vxlan transit information.

## 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/overlay-transit-state/test/binded-overlay-acl

### *Request Body*

None

### *Response Body*

## History

Release version	History
16r.1.00	This API call was introduced.

# queues-state

Displays the queue entries for an OpenFlow port.

## Resource URIs

URI	Description
<base_URI>/operational-state/queues-state	Displays the queue entries for an OpenFlow port.
<base_URI>/operational-state/queues-state/queue-interface-list	Displays the queue entries for an interface for an OpenFlow port.

## Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/queues-state

### Request Body

None

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running">
<queues-state xmlns="urn:brocade.com:mgmt:brocade-openflow-operational" y:self="/rest/operational-state/queues-state">
  <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22">
    <interface-value>Eth 1/1</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C0">
      <interface>Eth 1/1</interface>
      <num>0</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C1">
      <interface>Eth 1/1</interface>
      <num>1</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C2">
      <interface>Eth 1/1</interface>
      <num>2</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C3">
      <interface>Eth 1/1</interface>
      <num>3</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C4">
      <interface>Eth 1/1</interface>
      <num>4</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C5">
      <interface>Eth 1/1</interface>
      <num>5</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/queue-info-list/%22Eth 1/1%22%2C6">
      <interface>Eth 1/1</interface>
      <num>6</num>
    </queue-info-list>
  </queue-interface-list>
</queues-state>
</data>
```

```

        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/1%22/
queue-info-list/%22Eth 1/1%22%2C7">
        <interface>Eth 1/1</interface>
        <num>7</num>
        <tx-packets>7114</tx-packets>
        <tx-bytes>547777</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
1/8%22">
    <interface-value>Eth 1/8</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C0">
        <interface>Eth 1/8</interface>
        <num>0</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C1">
        <interface>Eth 1/8</interface>
        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C2">
        <interface>Eth 1/8</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C3">
        <interface>Eth 1/8</interface>
        <num>3</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C4">
        <interface>Eth 1/8</interface>
        <num>4</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C5">
        <interface>Eth 1/8</interface>
        <num>5</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C6">
        <interface>Eth 1/8</interface>
        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/8%22/
queue-info-list/%22Eth 1/8%22%2C7">
        <interface>Eth 1/8</interface>
        <num>7</num>
        <tx-packets>7114</tx-packets>
        <tx-bytes>547777</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth

```

```

1/11%22">
  <interface-value>Eth 1/11</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C0">
    <interface>Eth 1/11</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C1">
    <interface>Eth 1/11</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C2">
    <interface>Eth 1/11</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C3">
    <interface>Eth 1/11</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C4">
    <interface>Eth 1/11</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C5">
    <interface>Eth 1/11</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C6">
    <interface>Eth 1/11</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/11%22/
queue-info-list/%22Eth 1/11%22%2C7">
    <interface>Eth 1/11</interface>
    <num>7</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
1/12%22">
  <interface-value>Eth 1/12</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/
queue-info-list/%22Eth 1/12%22%2C0">
    <interface>Eth 1/12</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/
queue-info-list/%22Eth 1/12%22%2C1">
    <interface>Eth 1/12</interface>

```



```

        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/queue-info-list/%22Eth 1/12%22%2C2">
        <interface>Eth 1/12</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/queue-info-list/%22Eth 1/12%22%2C3">
        <interface>Eth 1/12</interface>
        <num>3</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/queue-info-list/%22Eth 1/12%22%2C4">
        <interface>Eth 1/12</interface>
        <num>4</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/queue-info-list/%22Eth 1/12%22%2C5">
        <interface>Eth 1/12</interface>
        <num>5</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/queue-info-list/%22Eth 1/12%22%2C6">
        <interface>Eth 1/12</interface>
        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/12%22/queue-info-list/%22Eth 1/12%22%2C7">
        <interface>Eth 1/12</interface>
        <num>7</num>
        <tx-packets>7113</tx-packets>
        <tx-bytes>561927</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22">
    <interface-value>Eth 1/41</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/queue-info-list/%22Eth 1/41%22%2C0">
        <interface>Eth 1/41</interface>
        <num>0</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/queue-info-list/%22Eth 1/41%22%2C1">
        <interface>Eth 1/41</interface>
        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/queue-info-list/%22Eth 1/41%22%2C2">
        <interface>Eth 1/41</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/

```

```

queue-info-list/%22Eth 1/41%22%2C3">
  <interface>Eth 1/41</interface>
  <num>3</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/
queue-info-list/%22Eth 1/41%22%2C4">
  <interface>Eth 1/41</interface>
  <num>4</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/
queue-info-list/%22Eth 1/41%22%2C5">
  <interface>Eth 1/41</interface>
  <num>5</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/
queue-info-list/%22Eth 1/41%22%2C6">
  <interface>Eth 1/41</interface>
  <num>6</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/41%22/
queue-info-list/%22Eth 1/41%22%2C7">
  <interface>Eth 1/41</interface>
  <num>7</num>
  <tx-packets>7113</tx-packets>
  <tx-bytes>561927</tx-bytes>
</queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
1/50%22">
  <interface-value>Eth 1/50</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C0">
  <interface>Eth 1/50</interface>
  <num>0</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C1">
  <interface>Eth 1/50</interface>
  <num>1</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C2">
  <interface>Eth 1/50</interface>
  <num>2</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C3">
  <interface>Eth 1/50</interface>
  <num>3</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C4">
  <interface>Eth 1/50</interface>
  <num>4</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>

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    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C5">
      <interface>Eth 1/50</interface>
      <num>5</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C6">
      <interface>Eth 1/50</interface>
      <num>6</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 1/50%22/
queue-info-list/%22Eth 1/50%22%2C7">
      <interface>Eth 1/50</interface>
      <num>7</num>
      <tx-packets>7113</tx-packets>
      <tx-bytes>561927</tx-bytes>
    </queue-info-list>
  </queue-interface-list>
  <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
2/1%22">
    <interface-value>Eth 2/1</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C0">
      <interface>Eth 2/1</interface>
      <num>0</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C1">
      <interface>Eth 2/1</interface>
      <num>1</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C2">
      <interface>Eth 2/1</interface>
      <num>2</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C3">
      <interface>Eth 2/1</interface>
      <num>3</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C4">
      <interface>Eth 2/1</interface>
      <num>4</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C5">
      <interface>Eth 2/1</interface>
      <num>5</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C6">
      <interface>Eth 2/1</interface>
      <num>6</num>

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        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/1%22/
queue-info-list/%22Eth 2/1%22%2C7">
        <interface>Eth 2/1</interface>
        <num>7</num>
        <tx-packets>8687</tx-packets>
        <tx-bytes>668899</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
2/2%22">
    <interface-value>Eth 2/2</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C0">
        <interface>Eth 2/2</interface>
        <num>0</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C1">
        <interface>Eth 2/2</interface>
        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C2">
        <interface>Eth 2/2</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C3">
        <interface>Eth 2/2</interface>
        <num>3</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C4">
        <interface>Eth 2/2</interface>
        <num>4</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C5">
        <interface>Eth 2/2</interface>
        <num>5</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C6">
        <interface>Eth 2/2</interface>
        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/2%22/
queue-info-list/%22Eth 2/2%22%2C7">
        <interface>Eth 2/2</interface>
        <num>7</num>
        <tx-packets>8693</tx-packets>
        <tx-bytes>669355</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth

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2/12%22">
  <interface-value>Eth 2/12</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C0">
    <interface>Eth 2/12</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C1">
    <interface>Eth 2/12</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C2">
    <interface>Eth 2/12</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C3">
    <interface>Eth 2/12</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C4">
    <interface>Eth 2/12</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C5">
    <interface>Eth 2/12</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C6">
    <interface>Eth 2/12</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/12%22/
queue-info-list/%22Eth 2/12%22%2C7">
    <interface>Eth 2/12</interface>
    <num>7</num>
    <tx-packets>8683</tx-packets>
    <tx-bytes>685957</tx-bytes>
  </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
2/31%22">
  <interface-value>Eth 2/31</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/
queue-info-list/%22Eth 2/31%22%2C0">
    <interface>Eth 2/31</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/
queue-info-list/%22Eth 2/31%22%2C1">
    <interface>Eth 2/31</interface>

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        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/queue-info-list/%22Eth 2/31%22%2C2">
        <interface>Eth 2/31</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/queue-info-list/%22Eth 2/31%22%2C3">
        <interface>Eth 2/31</interface>
        <num>3</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/queue-info-list/%22Eth 2/31%22%2C4">
        <interface>Eth 2/31</interface>
        <num>4</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/queue-info-list/%22Eth 2/31%22%2C5">
        <interface>Eth 2/31</interface>
        <num>5</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/queue-info-list/%22Eth 2/31%22%2C6">
        <interface>Eth 2/31</interface>
        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/31%22/queue-info-list/%22Eth 2/31%22%2C7">
        <interface>Eth 2/31</interface>
        <num>7</num>
        <tx-packets>8683</tx-packets>
        <tx-bytes>685957</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22">
    <interface-value>Eth 2/32</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/queue-info-list/%22Eth 2/32%22%2C0">
        <interface>Eth 2/32</interface>
        <num>0</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/queue-info-list/%22Eth 2/32%22%2C1">
        <interface>Eth 2/32</interface>
        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/queue-info-list/%22Eth 2/32%22%2C2">
        <interface>Eth 2/32</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/

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queue-info-list/%22Eth 2/32%22%2C3">
  <interface>Eth 2/32</interface>
  <num>3</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/
queue-info-list/%22Eth 2/32%22%2C4">
  <interface>Eth 2/32</interface>
  <num>4</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/
queue-info-list/%22Eth 2/32%22%2C5">
  <interface>Eth 2/32</interface>
  <num>5</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/
queue-info-list/%22Eth 2/32%22%2C6">
  <interface>Eth 2/32</interface>
  <num>6</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/32%22/
queue-info-list/%22Eth 2/32%22%2C7">
  <interface>Eth 2/32</interface>
  <num>7</num>
  <tx-packets>8683</tx-packets>
  <tx-bytes>685957</tx-bytes>
</queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
2/35%22">
  <interface-value>Eth 2/35</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C0">
  <interface>Eth 2/35</interface>
  <num>0</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C1">
  <interface>Eth 2/35</interface>
  <num>1</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C2">
  <interface>Eth 2/35</interface>
  <num>2</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C3">
  <interface>Eth 2/35</interface>
  <num>3</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>
</queue-info-list>
<queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C4">
  <interface>Eth 2/35</interface>
  <num>4</num>
  <tx-packets>0</tx-packets>
  <tx-bytes>0</tx-bytes>

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    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C5">
      <interface>Eth 2/35</interface>
      <num>5</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C6">
      <interface>Eth 2/35</interface>
      <num>6</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/35%22/
queue-info-list/%22Eth 2/35%22%2C7">
      <interface>Eth 2/35</interface>
      <num>7</num>
      <tx-packets>8687</tx-packets>
      <tx-bytes>686273</tx-bytes>
    </queue-info-list>
  </queue-interface-list>
  <queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
2/48%22">
    <interface-value>Eth 2/48</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C0">
      <interface>Eth 2/48</interface>
      <num>0</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C1">
      <interface>Eth 2/48</interface>
      <num>1</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C2">
      <interface>Eth 2/48</interface>
      <num>2</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C3">
      <interface>Eth 2/48</interface>
      <num>3</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C4">
      <interface>Eth 2/48</interface>
      <num>4</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C5">
      <interface>Eth 2/48</interface>
      <num>5</num>
      <tx-packets>0</tx-packets>
      <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C6">
      <interface>Eth 2/48</interface>
      <num>6</num>

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        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/48%22/
queue-info-list/%22Eth 2/48%22%2C7">
        <interface>Eth 2/48</interface>
        <num>7</num>
        <tx-packets>8691</tx-packets>
        <tx-bytes>686583</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth
2/66%22">
    <interface-value>Eth 2/66</interface-value>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C0">
        <interface>Eth 2/66</interface>
        <num>0</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C1">
        <interface>Eth 2/66</interface>
        <num>1</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C2">
        <interface>Eth 2/66</interface>
        <num>2</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C3">
        <interface>Eth 2/66</interface>
        <num>3</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C4">
        <interface>Eth 2/66</interface>
        <num>4</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C5">
        <interface>Eth 2/66</interface>
        <num>5</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C6">
        <interface>Eth 2/66</interface>
        <num>6</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
    <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/66%22/
queue-info-list/%22Eth 2/66%22%2C7">
        <interface>Eth 2/66</interface>
        <num>7</num>
        <tx-packets>0</tx-packets>
        <tx-bytes>0</tx-bytes>
    </queue-info-list>
</queue-interface-list>
<queue-interface-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth

```

```

2/68%22">
  <interface-value>Eth 2/68</interface-value>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C0">
    <interface>Eth 2/68</interface>
    <num>0</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C1">
    <interface>Eth 2/68</interface>
    <num>1</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C2">
    <interface>Eth 2/68</interface>
    <num>2</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C3">
    <interface>Eth 2/68</interface>
    <num>3</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C4">
    <interface>Eth 2/68</interface>
    <num>4</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C5">
    <interface>Eth 2/68</interface>
    <num>5</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C6">
    <interface>Eth 2/68</interface>
    <num>6</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
  <queue-info-list y:self="/rest/operational-state/queues-state/queue-interface-list/%22Eth 2/68%22/
queue-info-list/%22Eth 2/68%22%2C7">
    <interface>Eth 2/68</interface>
    <num>7</num>
    <tx-packets>0</tx-packets>
    <tx-bytes>0</tx-bytes>
  </queue-info-list>
</queue-interface-list>
</queues-state>
</data>

```

## History

Release version	History
16r.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
16r.1.00	This API call was introduced.

# spf-log-state

Displays ISIS IPv4 or IPv6 SPF LOG information.

## Resource URIs

URI	Description
<base_URI>/rest/operational-state/spf-log-state	Displays ISIS IPv4 or IPv6 SPF LOG information.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels	ISIS SPF LOG Level (Level-1 and level-2
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/log-counts	Number of logs
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-trigger-count	Number of SPF triggers and run currently
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/node-count	Number of nodes SPF traversed in a given SPF run
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events	Displays number of peers.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/isis-spf-log-reason	Displays number of clients.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/isis-lsp-name	ISIS SPF LSP Name
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/brief-reason	ISIS SPF reason
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/event-count	Displays the number of events that triggered this SPF run.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/node-count	Displays the number of routers and pseudonodes (LANs) that make up the topology calculated in this SPF run.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/time-stamp-ms	Time stamp in hundred millisecond
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/duration-ms	SPF run time
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/ipv4-routes	Displays the L1 SPF run added or deleted an IPv4 route.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/ipv6-routes	Displays the L1 SPF run added or deleted an IPv6 route.
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/first-trigger-change	Add, delete or modify event
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/first-trigger-time-stamp-ms	Time stamp in hundred millisecond
<base_URI>/rest/operational-state/spf-log-state/{spf-log-version}/spf-log-levels/{level}/spf-log-events/{spf-log-index}/first-trigger-detail-reason	Displays the decoded reason for the event.

## 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/spf-log-state

### Request Body

None

### Response Body

```
<spf-log-state xmlns="urn:brocade.com:mgmt:brocade-isis-operational" y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi">
  <spf-log-version>isis-ipv4-unicast-safi</spf-log-version>
  <spf-log-levels y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/isis-level1">
    <level>isis-level1</level>
    <log-counts>4</log-counts>
    <spf-trigger-count>0</spf-trigger-count>
    <node-count>2</node-count>
    <spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/isis-level1/spf-log-events/0">
      <spf-log-index>0</spf-log-index>
      <isis-spf-log-reason>isis-spf-reason-ppspf-new-lsp</isis-spf-log-reason>
      <isis-lsp-name>IXIA1101.00-00</isis-lsp-name>
      <brief-reason>LSP Added</brief-reason>
      <event-count>1</event-count>
      <node-count>2</node-count>
      <time-stamp-ms>1555</time-stamp-ms>
      <duration-ms>9</duration-ms>
      <ipv4-routes>11</ipv4-routes>
      <ipv6-routes>11</ipv6-routes>
      <first-trigger-change>Modified</first-trigger-change>
      <first-trigger-time-stamp-ms>375738</first-trigger-time-stamp-ms>
      <first-trigger-detail-reason>2m40s LSP IXIA1101.00-00 Added</first-trigger-detail-reason>
      <last-trigger-change></last-trigger-change>
      <last-trigger-time-stamp-ms>0</last-trigger-time-stamp-ms>
      <last-trigger-detail-reason></last-trigger-detail-reason>
    </spf-log-events>
    <spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/isis-level1/spf-log-events/1">
      <spf-log-index>1</spf-log-index>
      <isis-spf-log-reason>isis-spf-reason-adj-state-chg</isis-spf-log-reason>
      <isis-lsp-name>Fusion1.00-00</isis-lsp-name>
      <brief-reason>Adjacency State Change</brief-reason>
      <event-count>4</event-count>
      <node-count>1</node-count>
      <time-stamp-ms>1678</time-stamp-ms>
      <duration-ms>0</duration-ms>
      <ipv4-routes>0</ipv4-routes>
      <ipv6-routes>0</ipv6-routes>
      <first-trigger-change>Modified</first-trigger-change>
      <first-trigger-time-stamp-ms>375545</first-trigger-time-stamp-ms>
      <first-trigger-detail-reason>2m50s Reverse metric changed for adjacency Fusion1</first-trigger-detail-reason>
      <last-trigger-change>Added</last-trigger-change>
      <last-trigger-time-stamp-ms>375545</last-trigger-time-stamp-ms>
      <last-trigger-detail-reason>2m50s Adjacency IXIA1101 Added</last-trigger-detail-reason>
    </spf-log-events>
    <spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/isis-level1/spf-log-events/2">
      <spf-log-index>2</spf-log-index>
```

```

    <isis-spf-log-reason>enum=49</isis-spf-log-reason>
    <isis-lsp-name>Fusion1.00-00</isis-lsp-name>
    <brief-reason>Reverse Metric Change</brief-reason>
    <event-count>1</event-count>
    <node-count>1</node-count>
    <time-stamp-ms>1728</time-stamp-ms>
    <duration-ms>1</duration-ms>
    <ipv4-routes>0</ipv4-routes>
    <ipv6-routes>0</ipv6-routes>
    <first-trigger-change>Modified</first-trigger-change>
    <first-trigger-time-stamp-ms>375400</first-trigger-time-stamp-ms>
    <first-trigger-detail-reason>2m57s Reverse metric changed for adjacency Fusion1</first-trigger-
detail-reason>
    <last-trigger-change></last-trigger-change>
    <last-trigger-time-stamp-ms>0</last-trigger-time-stamp-ms>
    <last-trigger-detail-reason></last-trigger-detail-reason>
  </spf-log-events>
  <spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level1/spf-log-events/3">
    <spf-log-index>3</spf-log-index>
    <isis-spf-log-reason>isis-spf-reason-adj-change</isis-spf-log-reason>
    <isis-lsp-name>Fusion1.00-00</isis-lsp-name>
    <brief-reason>IS Neighbor TLV Change</brief-reason>
    <event-count>7</event-count>
    <node-count>1</node-count>
    <time-stamp-ms>1778</time-stamp-ms>
    <duration-ms>0</duration-ms>
    <ipv4-routes>0</ipv4-routes>
    <ipv6-routes>0</ipv6-routes>
    <first-trigger-change>Modified</first-trigger-change>
    <first-trigger-time-stamp-ms>375292</first-trigger-time-stamp-ms>
    <first-trigger-detail-reason>3m2s LSP Fusion1.00-00 Area Address TLV Changed</first-trigger-
detail-reason>
    <last-trigger-change>Added</last-trigger-change>
    <last-trigger-time-stamp-ms>375390</last-trigger-time-stamp-ms>
    <last-trigger-detail-reason>2m57s LSP IXIA1101.31-30 IS Neighbor TLV Changed</last-trigger-detail-
reason>
  </spf-log-events>
</spf-log-levels>
  <spf-log-levels y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level2">
    <level>isis-level2</level>
    <log-counts>5</log-counts>
    <spf-trigger-count>0</spf-trigger-count>
    <node-count>2</node-count>
    <spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level2/spf-log-events/0">
      <spf-log-index>0</spf-log-index>
      <isis-spf-log-reason>isis-spf-reason-area-change</isis-spf-log-reason>
      <isis-lsp-name>Fusion1.00-00</isis-lsp-name>
      <brief-reason>Area Address TLV Change</brief-reason>
      <event-count>1</event-count>
      <node-count>2</node-count>
      <time-stamp-ms>1505</time-stamp-ms>
      <duration-ms>1</duration-ms>
      <ipv4-routes>0</ipv4-routes>
      <ipv6-routes>0</ipv6-routes>
      <first-trigger-change>Modified</first-trigger-change>
      <first-trigger-time-stamp-ms>375837</first-trigger-time-stamp-ms>
      <first-trigger-detail-reason>2m35s LSP Fusion1.00-06 Area Address TLV Changed</first-trigger-
detail-reason>
      <last-trigger-change></last-trigger-change>
      <last-trigger-time-stamp-ms>0</last-trigger-time-stamp-ms>
      <last-trigger-detail-reason></last-trigger-detail-reason>
    </spf-log-events>
  <spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level2/spf-log-events/1">
    <spf-log-index>1</spf-log-index>
    <isis-spf-log-reason>isis-spf-reason-pspf-purge-lsp</isis-spf-log-reason>
    <isis-lsp-name>Fusion1.00-43</isis-lsp-name>
    <brief-reason>LSP Purged</brief-reason>
    <event-count>2</event-count>

```

```

<node-count>2</node-count>
<time-stamp-ms>1628</time-stamp-ms>
<duration-ms>1</duration-ms>
<ipv4-routes>0</ipv4-routes>
<ipv6-routes>0</ipv6-routes>
<first-trigger-change>Deleted</first-trigger-change>
<first-trigger-time-stamp-ms>375601</first-trigger-time-stamp-ms>
<first-trigger-detail-reason>2m47s LSP Fusion1.00-06 Purged</first-trigger-detail-reason>
<last-trigger-change>Deleted</last-trigger-change>
<last-trigger-time-stamp-ms>375602</last-trigger-time-stamp-ms>
<last-trigger-detail-reason>2m47s LSP Fusion1.00-43 Purged</last-trigger-detail-reason>
</spf-log-events>
<spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level2/spf-log-events/2">
  <spf-log-index>2</spf-log-index>
  <isis-spf-log-reason>enum=49</isis-spf-log-reason>
  <isis-lsp-name>Fusion1.00-00</isis-lsp-name>
  <brief-reason>Reverse Metric Change</brief-reason>
  <event-count>2</event-count>
  <node-count>2</node-count>
  <time-stamp-ms>1678</time-stamp-ms>
  <duration-ms>2</duration-ms>
  <ipv4-routes>1</ipv4-routes>
  <ipv6-routes>1</ipv6-routes>
  <first-trigger-change>Modified</first-trigger-change>
  <first-trigger-time-stamp-ms>375513</first-trigger-time-stamp-ms>
  <first-trigger-detail-reason>2m51s LSP Fusion2.00-00 Added</first-trigger-detail-reason>
  <last-trigger-change>Modified</last-trigger-change>
  <last-trigger-time-stamp-ms>375545</last-trigger-time-stamp-ms>
  <last-trigger-detail-reason>2m50s Reverse metric changed for adjacency Fusion1</last-trigger-
detail-reason>
</spf-log-events>
<spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level2/spf-log-events/3">
  <spf-log-index>3</spf-log-index>
  <isis-spf-log-reason>isis-spf-reason-ppspf-new-lsp</isis-spf-log-reason>
  <isis-lsp-name>Fusion2.01-00</isis-lsp-name>
  <brief-reason>LSP Added</brief-reason>
  <event-count>1</event-count>
  <node-count>1</node-count>
  <time-stamp-ms>1728</time-stamp-ms>
  <duration-ms>0</duration-ms>
  <ipv4-routes>0</ipv4-routes>
  <ipv6-routes>0</ipv6-routes>
  <first-trigger-change>Modified</first-trigger-change>
  <first-trigger-time-stamp-ms>375401</first-trigger-time-stamp-ms>
  <first-trigger-detail-reason>2m57s LSP Fusion2.01-00 Added</first-trigger-detail-reason>
  <last-trigger-change></last-trigger-change>
  <last-trigger-time-stamp-ms>0</last-trigger-time-stamp-ms>
  <last-trigger-detail-reason></last-trigger-detail-reason>
</spf-log-events>
<spf-log-events y:self="/rest/operational-state/spf-log-state/isis-ipv4-unicast-safi/spf-log-levels/
isis-level2/spf-log-events/4">
  <spf-log-index>4</spf-log-index>
  <isis-spf-log-reason>isis-spf-reason-adj-state-chg</isis-spf-log-reason>
  <isis-lsp-name>Fusion1.00-00</isis-lsp-name>
  <brief-reason>Adjacency State Change</brief-reason>
  <event-count>8</event-count>
  <node-count>1</node-count>
  <time-stamp-ms>1778</time-stamp-ms>
  <duration-ms>0</duration-ms>
  <ipv4-routes>0</ipv4-routes>
  <ipv6-routes>0</ipv6-routes>
  <first-trigger-change>Modified</first-trigger-change>
  <first-trigger-time-stamp-ms>375292</first-trigger-time-stamp-ms>
  <first-trigger-detail-reason>3m2s LSP Fusion1.00-00 Area Address TLV Changed</first-trigger-
detail-reason>
  <last-trigger-change>Added</last-trigger-change>
  <last-trigger-time-stamp-ms>375309</last-trigger-time-stamp-ms>
  <last-trigger-detail-reason>3m1s Adjacency Fusion2 Added</last-trigger-detail-reason>
</spf-log-events>

```

spf-log-state

```
</spf-log-levels>  
</spf-log-state>
```

## History

Release version	History
16r.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
16r.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
16r.1.00	This API call was introduced.



# tm-state

Displays TM statistics.

## Resource URIs

URI	Description
<base_URI>/operational-state/tm-state	Displays TM statistics.
<base_URI>/operational-state/tm-state/tmvoq	Displays VOQ information.
<base_URI>/operational-state/tm-state/tmvoqingvalegrvalprioal	Displays ingress, egress and priority.
<base_URI>/operational-state/tm-state/tmdevicestat	Displays device statistics.
<base_URI>/operational-state/tm-state/non-empty-voq	Displays non-empty voqs in the system.
<base_URI>/operational-state/tm-state/tmcpustatsslot	Displays TM voq stats for CPU port per slot.
<base_URI>/operational-state/tm-state/tmcpustatsslotallgrp	Displays TM voq stats for CPU port per slot for all CPU group.
<base_URI>/operational-state/tm-state/tm-top-discard-pkt-data	Displays TM voq stats to get list of top discarded packets.
<base_URI>/operational-state/tm-state/tm-top-max-queue-depth-data	Displays TM voq stats to get list of top max queue depth.
<base_URI>/operational-state/tm-state/tm-max-buff-util-data	Displays snapshot of maximum TM buffer utilization.
<base_URI>/operational-state/tmdevicestatscommon-state	Displays common TM device stats.
<base_URI>/operational-state/tm-state/tmvoqstatistics	Displays a summary of traffic management VOQ maximum queue depth statistics.
<base_URI>/operational-state/tm-state/cngn-mon-dev	Displays device monitoring information.
<base_URI>/operational-state/tm-state/cngn-mon-dev/discard-pkt-threshold	Displays discard packet monitoring threshold.
<base_URI>/operational-state/tm-state/cngn-mon-dev/discard-log-interval	Displays discard packet logging interval.
<base_URI>/operational-state/tm-state/cngn-mon-voq	Displays VOQ monitoring information.
<base_URI>/operational-state/tm-state/cngn-mon-voq/discard-voq-pkt-threshold	Displays VOQ discard packet monitoring threshold.
<base_URI>/operational-state/tm-state/cngn-mon-voq/discard-voq-log-interval	Displays VOQ discard packet logging interval.
<base_URI>/operational-state/tm-state/cngn-mon-del-pkt	Displays delete packet monitoring information.
<base_URI>/operational-state/tm-state/cngn-mon-del-pkt/delete-pkt-threshold	Displays delete packet monitoring threshold.
<base_URI>/operational-state/tm-state/cngn-mon-del-pkt/delete-log-interval	Displays delete packet logging interval.

## Usage Guidelines

Only GET operation is supported.

## Examples

### *URI*

http://host:80/rest/operational-state/tm-state

### *Request Body*

None

### *Response Body*

## History

Release version	History
16r.1.00	This API call was introduced.
17r.1.00	This API call was modified to include transient buffer congestion URIs.

# traffic-state

Displays information about IS-IS packet counts.

## Resource URIs

URI	Description
<base_URI>/rest/operational-state/traffic-state	Displays information about IS-IS packet counts
<base_URI>/rest/operational-state/traffic-state/l1-hello-rx	Displays the number of Level-1 hello PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-hello-tx	Displays the number of Level-1 hello PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-hello-rx	Displays the number of Level-2 hello PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-hello-tx	Displays the number of PTP hello PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/pp-hello-rx	Displays the number of PTP hello PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/pp-hello-tx	Displays the number of Level-1 hello PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l1-lsp-rx	Displays the number of Level-1 link-state PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-lsp-tx	Displays the number of Level-1 link-state PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-lsp-rx	Displays the number of Level-2 link-state PDUs received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-lsp-tx	Displays the number of Level-2 link-state PDUs sent by the device.
<base_URI>/rest/operational-state/traffic-state/l1-csnp-rx	Displays the number of Level-1 Complete Sequence Number PDUs (CSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-csnp-tx	Displays the number of Level-1 Complete Sequence Number PDUs (CSNPs) sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-csnp-rx	Displays the number of Level-2 Complete Sequence Number PDUs (CSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-csnp-tx	Displays the number of Level-2 Complete Sequence Number PDUs (CSNPs) sent by the device.
<base_URI>/rest/operational-state/traffic-state/l1-psnp-rx	Displays the number of Level-1 Partial Sequence Number PDUs (PSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l1-psnp-tx	Displays the number of Level-1 Partial Sequence Number PDUs (PSNPs) sent by the device.
<base_URI>/rest/operational-state/traffic-state/l2-psnp-rx	Displays the number of Level-2 Partial Sequence Number PDUs (PSNPs) received by the device.
<base_URI>/rest/operational-state/traffic-state/l2-psnp-tx	Displays the number of Level-2 Partial Sequence Number PDUs (PSNPs) sent by the device.

## 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/traffic-state

### Request Body

None

### Response Body

```
<traffic-state xmlns="urn:brocade.com:mgmt:brocade-isis-operational" y:self="/rest/operational-state/traffic-state">
  <l1-hello-rx>0</l1-hello-rx>
  <l1-hello-tx>0</l1-hello-tx>
  <l2-hello-rx>0</l2-hello-rx>
  <l2-hello-tx>0</l2-hello-tx>
  <pp-hello-rx>102991</pp-hello-rx>
  <pp-hello-tx>111819</pp-hello-tx>
  <l1-lsp-rx>0</l1-lsp-rx>
  <l1-lsp-tx>0</l1-lsp-tx>
  <l2-lsp-rx>134517</l2-lsp-rx>
  <l2-lsp-tx>224205</l2-lsp-tx>
  <l1-csnp-rx>274</l1-csnp-rx>
  <l1-csnp-tx>5131</l1-csnp-tx>
  <l2-csnp-rx>1095</l2-csnp-rx>
  <l2-csnp-tx>6149</l2-csnp-tx>
  <l1-psnp-rx>0</l1-psnp-rx>
  <l1-psnp-tx>0</l1-psnp-tx>
  <l2-psnp-rx>54287</l2-psnp-rx>
  <l2-psnp-tx>54949</l2-psnp-tx>
</traffic-state>
```

## History

Release version	History
16r.1.00	This API call was introduced.

## vc-peer-state

Displays the bd-vc peer state.

### Resource URIs

URI	Description
<base_URI>/operational-state/vc-peer-state	Displays the VC peer state.

### Usage Guidelines

Only GET operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/vc-peer-state

### Request Body

None

### Response Body

```
<data xmlns="http://brocade.com/ns/rest" xmlns:y="http://brocade.com/ns/rest" y:self="/rest/config/running">
<vc-peer-state xmlns="urn:brocade.com:mgmt:brocade-pwm-operational" y:self="/rest/operational-state/vc-peer-state">
  <vc-peer-data y:self="/rest/operational-state/vc-peer-state/vc-peer-data/1">
    <vc-id>1</vc-id>
    <vc-peer-address>4.4.3.2</vc-peer-address>
    <vc-peer-state y:self="/rest/operational-state/vc-peer-state/vc-peer-data/1/vc-peer-state">Operational</vc-peer-state>
    <vc-peer-uptime>&quot;22 hr 35 min 41 sec &quot;</vc-peer-uptime>
    <vc-peer-load-balance>true</vc-peer-load-balance>
    <vc-peer-cos-enabled>false</vc-peer-cos-enabled>
    <vc-peer-cos-value>0</vc-peer-cos-value>
    <vc-ldp-tnnl-in-use>&quot;&quot;</vc-ldp-tnnl-in-use>
    <vc-local-label>983040</vc-local-label>
    <vc-remote-label>983093</vc-remote-label>
    <vc-local-mtu>1500</vc-local-mtu>
    <vc-remote-mtu>1500</vc-remote-mtu>
    <vc-local-type>4</vc-local-type>
    <vc-remote-type>4</vc-remote-type>
    <vc-proto-tnnl y:self="/rest/operational-state/vc-peer-state/vc-peer-data/1/vc-proto-tnnl/rsvp">
      <vc-proto-name>rsvp</vc-proto-name>
      <vc-ldp-tunnel-id>0</vc-ldp-tunnel-id>
      <vc-ldp-name>&quot;&quot;</vc-ldp-name>
      <vc-lsp-name>tor4_1</vc-lsp-name>
      <vc-peer-lsp-cos-enabled>false</vc-peer-lsp-cos-enabled>
      <vc-peer-lsp-cos-value>0</vc-peer-lsp-cos-value>
    </vc-proto-tnnl>
    <vc-proto-tnnl y:self="/rest/operational-state/vc-peer-state/vc-peer-data/1/vc-proto-tnnl/rsvp">
      <vc-proto-name>rsvp</vc-proto-name>
      <vc-ldp-tunnel-id>0</vc-ldp-tunnel-id>
      <vc-ldp-name>&quot;&quot;</vc-ldp-name>
      <vc-lsp-name>tor4_2</vc-lsp-name>
      <vc-peer-lsp-cos-enabled>false</vc-peer-lsp-cos-enabled>
      <vc-peer-lsp-cos-value>0</vc-peer-lsp-cos-value>
    </vc-proto-tnnl>
  </vc-peer-data>
</vc-peer-state>
```

## History

Release version	History
16r.1.00	This API call was introduced.

# vxlan-acl-state/extended-data

Displays Vxlan ACL information.

## Resource URIs

URI	Description
<base_URI>/operational-state/vxlan-acl-state/extended-data/{aclname}/	Displays Vxlan ACL information.

## 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/vxlan-acl-state/extended-data/ext-test

### Request Body

None

### Response Body

```
<extended-data xmlns="urn:brocade.com:mgmt:brocade-ssm-operational" xmlns:y="http://brocade.com/ns/rest"
y:self="/rest/operational-state/vxlan-acl-state/extended-data/ext-test">
  <acl-name>ext-test</acl-name>
  <seq-num>10</seq-num>
  <permit-deny>permit</permit-deny>
  <dst-vtep-ip>0.0.0.0</dst-vtep-ip>
  <src-vtep-ip>0.0.0.0</src-vtep-ip>
  <vni>0</vni>
  <vni-mask>0</vni-mask>
  <dst-ip>0.0.0.0</dst-ip>
  <dst-ip-mask>32</dst-ip-mask>
  <src-ip>0.0.0.0</src-ip>
  <src-ip-mask>32</src-ip-mask>
  <dst-port>0</dst-port>
  <src-port>0</src-port>
  <count>0</count>
  <byte-count>0</byte-count>
  <transit-name>test</transit-name>
  <sflow>true</sflow>
</extended-data>
```

## History

Release version	History
16r.1.00	This API call was introduced.



# Operations API

---

## activate-status

Retrieves the firmware activation status.

### Resource URIs

URI	Description
<base_URI>/operational-state/activate-status	Retrieves the firmware activation status.
URI	Description
<base_URI>/operations/activate-status	Retrieves the firmware activation status.

### Parameters

*overall-status*

Displays overall activation status on the switch.

*rbridge-id*

The RBridge ID.

*status*

Displays the activation status for a particular RBridge ID.

### Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/activate-status

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>
  <activate-entries>
    <rbridge-id>54</rbridge-id>
    <status>0</status>
  </activate-entries>
</output>

<output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
  <overall-status>0</overall-status>
  <status>0</status>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# bna-config-cmd

Copies configuration data to or from the system.

## Resource URIs

URI	Description
<base_URI>/operational-state/bna-config-cmd	Copy configuration data to or from the system.
URI	Description
<base_URI>/operations/bna-config-cmd	Copy configuration data to or from the system.

## Parameters

*session-id*

This ID is used along with bna-config-cmd-status API to get the status of this operation (inprogress/complete).

*status*

Displays the status of this operation (inprogress/complete).

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/bna-config-cmd

http://host:80/rest/operations/bna-config-cmd

### Request Body

```
<bna-config-cmd>
  <src>running-config</src>
  <dest>startup-config</dest>
</bna-config-cmd>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras'>
  <session-id>0</session-id>
  <status>in-progress</status>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# bna-config-cmd-status

Retrieves the status of a previous configuration command.

## Resource URIs

URI	Description
<base_URI>/operational-state/bna-config-cmd-status	Retrieves the status of a previous configuration command.
URI	Description
<base_URI>/operations/bna-config-cmd-status	Retrieves the status of a previous configuration command.

## Parameters

*status*

Shows the status of API bna-config-cmd (completed/inprogress).

*status-string*

Displays BNA config command status.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/bna-config-cmd-status

http://host:80/rest/operations/bna-config-cmd-status

### Request Body

```
<bna-config-cmd-status>
  <session-id>0</session-id>
</bna-config-cmd-status>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras'>
  <status>completed</status>
  <status-string></status-string>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# clear-mpls-ldp-neighbor

Clears all LDP neighbors or a specified LDP neighbor.

## Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-ldp-neighbor	Clears all LDP neighbors or a specified LDP neighbor.

## Parameters

*mpls-clear-all-ldp-sessions*

Specifies to clear all LDP neighbors.

*mpls-clear-one-ldp-sessions*

Specifies the LDP neighbor's IP to be cleared.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/clear-mpls-ldp-neighbor

### Request Body

```
<clear-mpls-ldp-neighbor><mpls-clear-all-ldp-sessions>>true</mpls-clear-all-ldp-sessions></clear-mpls-ldp-neighbor>
```

```
<clear-mpls-ldp-neighbor><mpls-clear-one-ldp-sessions>15.15.1.1</mpls-clear-one-ldp-sessions></clear-mpls-ldp-neighbor>
```

### Response Body

None

## History

Release version	Command history
16r.1.00	This API call was introduced.

# clear-mpls-ldp-statistics

Clears MPLS LDP control plane statistics.

## Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-ldp-statistics	Clears MPLS LDP control plane statistics.

## Usage Guidelines

Only POST operation is supported.

## Examples

### *URI*

http://host:80/rest/operations/clear-mpls-ldp-statistics

### *Request Body*

<clear-mpls-ldp-statistics></clear-mpls-ldp-statistics>

### *Response Body*

None

## History

Release version	Command history
16r.1.00	This API call was introduced.



# clear-mpls-lsp

Resets and re-enables tunnel

## Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-lsp	Resets and re-enables tunnel.

## Parameters

*mpls-clear-lsp-name-in*

Specifies the LSP name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/clear-mpls-lsp

### Request Body

```
<clear-mpls-lsp><mpls-clear-lsp-name-in>16</mpls-clear-lsp-name-in></clear-mpls-lsp>
```

### Response Body

None

## History

Release version	Command history
16r.1.00	This API call was introduced.

# clear-mpls-rsvp-statistics

Clears MPLS RSVP control plane statistics.

## Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-rsvp-statistics	Clears MPLS RSVP control plane statistics.

## Usage Guidelines

Only POST operation is supported.

## Examples

### *URI*

http://host:80/rest/operations/clear-mpls-rsvp-statistics

### *Request Body*

```
<clear-mpls-rsvp-statistics></clear-mpls-rsvp-statistics>
```

### *Response Body*

None

## History

Release version	Command history
16r.1.00	This API call was introduced.

# clear-mpls-rsvp-statistics-neighbor

Clears all RSVP neighbors or a specified RSVP neighbor.

## Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-rsvp-statistics-neighbor	Clears all RSVP neighbors or a specified RSVP neighbor.

## Parameters

*clear-mpls-rsvp-statistics-neighbor-all*  
Specifies to clear all RSVP neighbors.

*clear-mpls-rsvp-statistics-neighbor-address*  
Specifies the RSVP neighbor IP to be cleared.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/clear-mpls-rsvp-statistics-neighbor

### Request Body

```
<clear-mpls-rsvp-statistics-neighbor><clear-mpls-rsvp-statistics-neighbor-all>true</clear-mpls-rsvp-statistics-neighbor-all></clear-mpls-rsvp-statistics-neighbor>
```

```
<clear-mpls-rsvp-statistics-neighbor><clear-mpls-rsvp-statistics-neighbor-address>6.15.1.15</clear-mpls-rsvp-statistics-neighbor-address></clear-mpls-rsvp-statistics-neighbor>
```

### Response Body

None

## History

Release version	Command history
16r.1.00	This API call was introduced.

# clear-mpls-statistics

Clears MPLS statistics.

## Resource URIs

URI	Description
<base_URI>/operations/clear-mpls-statistics	Clears MPLS statistics.

## Parameters

*mpls-clear-statistics-type*

Specifies one of the following statistics to be cleared - OAM, tunnel, or transit traffic statistics.

*tunnel-name*

Specifies the tunnel name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/clear-mpls-statistics

### Request Body

```
<clear-mpls-statistics><mpls-clear-statistics-type>3</mpls-clear-statistics-type><tunnel-name>t2</tunnel-name></clear-mpls-statistics>
```

### Response Body

None

## History

Release version	Command history
16r.1.00	This API call was introduced.

# dad-status

Displays the current status of firmware download.

## Resource URIs

URI	Description
<base_URI>/operational-state/dad-status	Displays the current status of firmware download.
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

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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# fcoe-get-interface

Retrieves the FCoE interface information.

## Resource URIs

URI	Description
<base_URI>/operational-state/fcoe-get-interface	Retrieves the FCoE interface information.
URI	Description
<base_URI>/operations/fcoe-get-interface	Retrieves the FCoE interface information.

## Parameters

*fcoe-intf-total-interfaces*

Displays the total number of interfaces whose details are being returned.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/fcoe-get-interface

http://host:80/rest/operations/fcoe-get-interface

### Request Body

```
<fcoe-intf-total-interfaces></fcoe-intf-total-interfaces>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fcoe-ext'>
  <fcoe-intf-total-interfaces>0</fcoe-intf-total-interfaces>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.



# fcoe-get-login

Retrieves the login information on FCoE End nodes that have logged in to the managed device.

## Resource URIs

URI	Description
<base_URI>/operational-state/fcoe-get-login	Retrieves the login information on FCoE End nodes that have logged in to the managed device.
URI	Description
<base_URI>/operations/fcoe-get-login	Retrieves the login information on FCoE End nodes that have logged in to the managed device.

## Parameters

*fcoe-login-total-logins*

Displays the total number of devices logged in.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/fcoe-get-login

http://host:80/rest/operations/fcoe-get-login

### Request Body

```
<fcoe-get-login></fcoe-get-login>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fcoe-ext'>
  <fcoe-login-total-logins>0</fcoe-login-total-logins>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# firmware-download

Retrieves the firmware level commands.

## Resource URIs

URI	Description
<base_URI>/operational-state/firmware-download	Retrieves the firmware level commands.
URI	Description
<base_URI>/operations/firmware-download	Retrieves the firmware level commands.

## Parameters

*rbridge-id*

Displays the Rbridge ID for the switch where firmware download initiated.

*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/operational-state/firmware-download

http://host:80/rest/operations/firmware-download

### Request Body (for coldboot)

```
<firmware-download>
  <scp>
    <user>fvt</user>
    <password>pray4green</password>
    <host>10.31.2.25</host>
    <directory>/buildsjc/sre/SQA/nos/nos6.0.1/nos6.0.1_bld20</directory>
  </scp>
  <rbridge-id>6</rbridge-id>
  <coldboot></coldboot>
</firmware-download>

<firmware-download>
  <scp>
    <user>fvt</user>
    <password>pray4green</password>
    <host>10.31.2.25</host>
    <directory>/buildsjc/sre/SQA/nos/slxl6r.1.00/slxl6r.1.00_bld20</directory>
  </scp>
  <coldboot></coldboot>
</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>
  <rbridge-id>all</rbridge-id>
  <auto-activate/>
</firmware-download>

<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'>
  <cluster-output>
    <rbridge-id>6</rbridge-id>
    <fwdl-status>0</fwdl-status>
    <fwdl-msg>Disruptive.</fwdl-msg>
  </cluster-output>
  <fwdl-cmd-status>0</fwdl-cmd-status>
```

```

    <fwdl-cmd-msg>Logical-chassis firmware download initiated.</fwdl-cmd-msg>
  </output>

  <output xmlns='urn:brocade.com:mgmt:brocade-firmware'>
    <cluster-output>
      <fwdl-status>0</fwdl-status>
      <fwdl-msg>Disruptive.</fwdl-msg>
    </cluster-output>
    <fwdl-cmd-status>0</fwdl-cmd-status>
    <fwdl-cmd-msg>Logical-chassis firmware download initiated.</fwdl-cmd-msg>
  </output>

```

## History

Release version	History
6.0.1	This API call was introduced.
6.0.1a	This API call was modified to add the option <i>auto-activate</i> for ISSU firmware-download.

Release version	History
16r.1.00	This API call was introduced.

# fwdl-status

Retrieves the firmware download status.

## Resource URIs

URI	Description
<base_URI>/operational-state/fwdl-status	Retrieves the firmware download status.
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/operational-state/fwdl-status

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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-contained-in-ID

Retrieves enclosure related information on embedded platforms.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-contained-in-ID	Retrieves enclosure related information on embedded platforms.
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/operational-state/get-contained-in-ID

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	History
5.0.1	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-interface-detail	Retrieves operational data for a given VLAN and enumeration of all the interfaces belonging to this VLAN.

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-role*

Displays the current role that the particular interface is playing. This is applicable only for physical interfaces.

*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.

*line-duplex-state*

Displays the 'Line duplex state' 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.

*ifHCOUcastPkts*

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.

*ifHCOMulticastPkts*

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.

*ifHCOBroadcastPkt*

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.

*ifHCOutErrors*

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.

*ip-mtu*

Displays the IP MTU value of this interface.

*line-protocol-exception-info*

Displays the 'Exception information' of line protocol.

*media-type*

Displays the media type.

*wavelength*

Displays the wavelength of pluggable media.

*if-description*

Displays the textual string containing information about the interface.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-interface-detail

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>FortyGigabitEthernet</interface-type>
    <interface-name>1/0/49</interface-name>
    <port-role>edge</port-role>
    <port-mode>unknown</port-mode>
    <if-name>FortyGigabitEthernet 1/0/49</if-name>
    <if-state>up</if-state>
    <line-protocol-state>down</line-protocol-state>
    <line-protocol-state-info>(link protocol down)</line-protocol-state-info>
    <hardware-type>ethernet</hardware-type>
    <current-hardware-address>00:27:f8:ce:5c:4e</current-hardware-address>
    <logical-hardware-address>00:27:f8:ce:5c:4e</logical-hardware-address>
    <ifindex>4496695488</ifindex>
    <mtu>2500</mtu>
    <actual-line-speed>nil</actual-line-speed>
    <configured-line-speed>auto</configured-line-speed>
    <line-duplex-state>full</line-duplex-state>
    <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>
</output>
```

```
<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>up</if-state>
    <line-protocol-state>up</line-protocol-state>
    <hardware-type>aggregate</hardware-type>
    <current-hardware-address>60:9c:9f:0e:e6:f0</current-hardware-address>
    <logical-hardware-address>60:9c:9f:0e:e6:f0</logical-hardware-address>
    <if-description>lag-to-bek-1</if-description>
    <ifindex>671088641</ifindex>
    <mtu>9216</mtu>
    <actual-line-speed>600Gbps</actual-line-speed>
    <configured-line-speed>100Gbps</configured-line-speed>
    <queuing-strategy>fifo</queuing-strategy>
    <ifHCInOctets>82201936202292</ifHCInOctets>
```

```

<ifHCInUcastPkts>316118913731</ifHCInUcastPkts>
<ifHCInMulticastPkts>466925</ifHCInMulticastPkts>
<ifHCInBroadcastPkts>0</ifHCInBroadcastPkts>
<ifHCInErrors>0</ifHCInErrors>
<ifHCOutOctets>83391499158384</ifHCOutOctets>
<ifHCOutUcastPkts>320694336080</ifHCOutUcastPkts>
<ifHCOutMulticastPkts>431024</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>
  <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 says 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 request body below.

```

<get-interface-detail>
  <last-rcvd-interface>
    <interface-type>TenGigabitEthernet</interface-type>
    <interface-name>7/0/33</interface-name>
  </last-rcvd-interface>
</get-interface-detail>

<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 request body below.

```

<get-interface-detail>
  <interface-type>TenGigabitEthernet</interface-type>
  <interface-name>7/0/22</interface-name>
</get-interface-detail>

<get-interface-detail>
  <interface-type>port-channel</interface-type>

```

```
<interface-name>2</interface-name>  
</get-interface-detail>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-interface-switchport	Returns switch-port or Layer 2 characteristics of all the interfaces in the managed device.
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.

*fcqe-port-enabled*

Displays the FCoE capability is enabled on the interface.

*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/operational-state/get-interface-switchport

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>195/2/1</interface-name>
    <interface-type>FortyGigabitEthernet</interface-type>
    <mode>access</mode>
    <fcoe-port-enabled>>false</fcoe-port-enabled>
    <ingress-filter-enabled>>true</ingress-filter-enabled>
    <acceptable-frame-type>admit-all</acceptable-frame-type>
    <default-vlan>1</default-vlan>
    <active-vlans>
      <vlanid>1</vlanid>
    </active-vlans>
  </switchport>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <switchport>
    <interface-name>195/2/1</interface-name>
    <interface-type>port-channel</interface-type>
    <mode>access</mode>
    <fcoe-port-enabled>>false</fcoe-port-enabled>
    <ingress-filter-enabled>>true</ingress-filter-enabled>
    <acceptable-frame-type>admit-all</acceptable-frame-type>
    <default-vlan>1</default-vlan>
    <active-vlans>
      <vlanid>1</vlanid>
    </active-vlans>
  </switchport>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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.

URI	Description
<base_URI>/operational-state/get-ip-interface	Retrieves the IP interface details.

## Parameters

### *interface-type*

Displays the network interface name in a VCS environment in the format: [rbridge-id]/slot/port.

### *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/operational-state/get-ip-interface

http://host:80/rest/operations/get-ip-interface

### Request Body

```
<get-ip-interface></get-ip-interface>
```

### Response Body

```
<output>
  <interface>
    <interface-type>FortyGigabitEthernet</interface-type>
    <interface-name>2/0/49</interface-name>
    <if-name>FortyGigabitEthernet 2/0/49</if-name>
    <if-state>up</if-state>
    <line-protocol-state>down</line-protocol-state>
    <ip-address>
      <ipv4>unassigned</ipv4>
    </ip-address>
  </interface>
  <interface>
    <interface-type>FortyGigabitEthernet</interface-type>
    <interface-name>2/0/50</interface-name>
    <if-name>FortyGigabitEthernet 2/0/50</if-name>
    <if-state>up</if-state>
    <line-protocol-state>down</line-protocol-state>
    <ip-address>
      <ipv4>unassigned</ipv4>
    </ip-address>
  </interface>
</output>

<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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-last-config-update-time	Retrieves the time stamp of the last configuration change.

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/operational-state/get-last-config-update-time

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>1402481614</last-config-update-time>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-last-config-update-time-for-xpaths	Retrieves the time stamp of the last configuration change for xpaths.

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/operational-state/get-last-config-update-time-for-xpaths

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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-lldp-neighbor-detail	Retrieves the neighbor details of all the interfaces of the managed entity.
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/operational-state/get-lldp-neighbor-detail

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>TenGigabitEthernet 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>TenGigabitEthernet 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>

<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>
<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
6.0.1	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-mac-acl-for-intf	Retrieves the MAC ACL applied on the interfaces.
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/operational-state/get-mac-acl-for-intf

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>TenGigabitEthernet</interface-type>
    <ingress-policy>
      <policy-name>stdmacacl</policy-name>
    </ingress-policy>
    <egress-policy>
      <policy-name>stdmacacl</policy-name>
    </egress-policy>
  </interface>
</output>
```

```
<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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-mac-address-table	Returns operational data for a given MAC entry and the corresponding details of that MAC entry.
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/operational-state/get-mac-address-table

http://host:80/rest/operations/get-mac-address-table

### Request Body

### Response Body

### Request Body

```
<get-mac-address-table>
  <last-mac-address-details>
    <last-mac-address>00:11:11:82:12:92</last-mac-address>
    <last-vlan-id>10</last-vlan-id>
    <last-mac-type>dynamic</last-mac-type>
  </last-mac-address-details>
  <forwarding-interface-type>tengigabitethernet</forwarding-interface-type>
  <forwarding-interface-name>9/1/6</forwarding-interface-name>
</get-mac-address-table>

<get-mac-address-table>
  <interface-type>port-channel</interface-type>
  <interface-name>7/0/3</interface-name>
</get-mac-address-table>
```

### Response Body

```
<<output xmlns='urn:brocade.com:mgmt:brocade-mac-address-table'>
  <mac-address-table>
    <vlanid>10</vlanid>
    <mac-address>10:00:20:00:30:00</mac-address>
    <mac-type>dynamic</mac-type>
    <mac-state>active</mac-state>
    <forwarding-interface>
      <interface-type>tengigabitethernet</interface-type>
      <interface-name>9/1/6</interface-name>
    </forwarding-interface>
  </mac-address-table><has-more>>false</has-more>
</output>

<output xmlns='urn:brocade.com:mgmt:brocade-mac-address-table'>
  <mac-address-table>
    <vlanid>53</vlanid>
    <mac-address>00:05:33:48:8e:4f</mac-address>
    <mac-type>dynamic</mac-type>
    <mac-state>active</mac-state>
    <forwarding-interface>
      <interface-type>port-channel</interface-type>
      <interface-name>7/0/3</interface-name>
    </forwarding-interface>
  </mac-address-table>
  <has-more>>false</has-more>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.
6.0.0	This API was modified to include the has-more information details.
7.1.0	Updated the example sections to reflect the interface and forwarding interface filters.

Release version	Command history
16r.1.00	This API call was introduced.

# get-media-detail

Retrieves the media properties of all the interfaces.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-media-detail	Retrieves the media properties of all the interfaces.
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.

*speed*

Displays the interface speed.

*connector*

Displays the connector type.

*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/operational-state/get-media-detail

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>FortyGigabitEthernet</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>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-interface-ext'>
  <interface>
    <interface-type>ethernet</interface-type>
    <interface-name>0/1</interface-name>
    <sfp>
      <speed>10Gbps</speed>
      <connector>lc</connector>
      <encoding>6</encoding>
      <vendor-name>BROCADE </vendor-name>
      <vendor-oui>00:05:1e</vendor-oui>
      <vendor-pn>57-0000075-01 </vendor-pn>
      <vendor-rev>A </vendor-rev>
      <distance>unknown</distance>
      <media-form-factor>unknown</media-form-factor>
      <wavelength>850</wavelength>
      <serial-no>AAF210480000D1E </serial-no>
      <date-code>101124 </date-code>
      <temperature>29</temperature>
      <voltage>3299.0</voltage>
      <current>7.678</current>
      <tx-power>607.0</tx-power>
      <rx-power>589.2</rx-power>
    </sfp>
  </interface>
</interface>
```

```

<interface-type>ethernet</interface-type>
<interface-name>0/2</interface-name>
<sfp>
  <speed>10Gbps</speed>
  <connector>lc</connector>
  <encoding>unknown</encoding>
  <vendor-name>BROCADE      </vendor-name>
  <vendor-oui>00:05:1e</vendor-oui>
  <vendor-pn>57-0000075-01  </vendor-pn>
  <vendor-rev>A      </vendor-rev>
  <distance>unknown</distance>
  <media-form-factor>unknown</media-form-factor>
  <wavelength>850 </wavelength>
  <serial-no>AAF211180000DBL </serial-no>
  <date-code>110425 </date-code>
  <temperature>24</temperature>
  <voltage>3310.0</voltage>
  <current>0.068</current>
  <tx-power>30.9</tx-power>
  <rx-power>548.0</rx-power>
</sfp>
</interface>
</output>

```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.
18r.1.00	This API call was modified.

# get-nameserver-detail

Retrieves the detailed information of the devices stored in the name server database.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-nameserver-detail	Retrieves the detailed information of the devices stored in the name server database.
URI	Description
<base_URI>/operations/get-nameserver-detail	Retrieves the detailed information of the devices stored in the name server database.

## Parameters

### *nameserver-portid*

Displays the list of all Nx\_Ports registered in the name server database of this managed device.

### *nameserver-portname*

Displays the Port\_Name (WWN) of this Nx\_Port.

### *nameserver-nodename*

Displays the Node\_Name (WWN) of this Nx\_Port.

### *nameserver-cos*

Displays the Fibre Channel Class of service supported by the device.

### *nameserver-scr*

Displays the state change notifications that the device has registered for.

### *nameserver-fc4s*

Displays the Fibre Channel FC4 services supported by the device.

### *nameserver-portsymb*

Displays the user-defined name of this port.

### *nameserver-nodesymb*

Displays the user-defined name of the node of this port.

### *nameserver-fabric-portname*

Displays the Fabric port name (WWN) of this port.

### *nameserver-permanent-portname*

Displays the type and role of the device.

### *nameserver-devicetype*

Displays the type and role of the device.

### *nameserver-porttype*

Displays the Fibre Channel port type.

### *nameserver-index*

Displays the Port index number.

*nameserver-sharearea*

Indicates whether or not the port utilizes the Extreme shared area method of Fibre channel addressing.

*nameserver-redirect*

Indicates whether or not the device is involved in Extreme frame redirection zoning.

*nameserver-xlatedomain*

Indicates whether or not the device enters the fabric via a translate domain.

*nameserver-connected-via-ag*

Indicates whether or not the device enters the fabric via access gateway.

*nameserver-ag-base-device*

Indicates whether or not the device is a base access gateway device.

*nameserver-real*

Indicates whether or not the device entered in the fabric via AG is a physical device.

*nameserver-cascaded*

Indicates whether or not the device enters the fabric via a cascaded AG.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-nameserver-detail

http://host:80/rest/operations/get-nameserver-detail

### Request Body

```
<get-nameserver-detail></get-nameserver-detail>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-nameserver'>
  <show-nameserver>
    <nameserver-portid>0d0000</nameserver-portid>
    <nameserver-portname>20:00:8C:7C:FF:21:C0:00</nameserver-portname>
    <nameserver-nodename>20:00:8C:7C:FF:21:C0:01</nameserver-nodename>
    <nameserver-cos>3</nameserver-cos>
    <nameserver-scr>0</nameserver-scr>
    <nameserver-fc4s>FCP </nameserver-fc4s>
    <nameserver-portsymb>[7] "13/0/52"</nameserver-portsymb>
    <nameserver-nodesymb>NULL</nameserver-nodesymb>
    <nameserver-fabric-portname>50:02:7F:8C:31:32:30:82</nameserver-fabric-portname>
    <nameserver-permanent-portname>20:00:8C:7C:FF:21:C0:00</nameserver-permanent-portname>
    <nameserver-devicetype>Physical Target</nameserver-devicetype>
    <nameserver-porttype>N</nameserver-porttype>
    <nameserver-index>130</nameserver-index>
    <nameserver-sharearea>Yes</nameserver-sharearea>
    <nameserver-redirect>No</nameserver-redirect>
    <nameserver-xlatedomain>No</nameserver-xlatedomain>
    <nameserver-connected-via-ag>No</nameserver-connected-via-ag>
    <nameserver-ag-base-device>No</nameserver-ag-base-device>
    <nameserver-real>No</nameserver-real>
    <nameserver-cascaded>No</nameserver-cascaded>
  </show-nameserver>
</output>
```

## History

Release version	History
5.0.1	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-netconf-client-capabilities	Retrieves the vendor information of all the NETCONF clients.
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/operational-state/get-netconf-client-capabilities

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	History
5.0.0	This API call was introduced.
6.0.0	This API call was modified to include the parameter <i>af-type</i> .

Release version	Command history
16r.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>/operational-state/get-port-channel-detail	Retrieves the Link Aggregation Control Protocol (LACP) information for all port-channel.

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.

*isvlag*

Specifies if the aggregator is a vLAG.

*aggregator-mode*

Displays the aggregator mode.

*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.

*admin-key*

Displays the Admin key.

*oper-key*

Displays the Operational key.

*partner-oper-key*

Displays the Partner Operational key.

*rx-link-count*

Displays the RX link counter.

*tx-link-count*

Displays the TX link counter.

*individual-agg*

Displays the individual aggregator.

*ready-agg*

Displays the ready aggregator.

*rbridge-id*

Displays the RBridge ID.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*actor-port*

Displays the actor port number.

*sync*

Displays the sync-info.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-port-channel-detail

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>6</aggregator-id>
    <aggregator-type>standard</aggregator-type>
    <isvlag>true</isvlag>
    <aggregator-mode>dynamic</aggregator-mode>
    <system-priority>32768</system-priority>
    <actor-system-id>01:e0:52:00:20:00</actor-system-id>
    <partner-oper-priority>32768</partner-oper-priority>
    <partner-system-id>00:05:1e:cd:19:6a</partner-system-id>
    <admin-key>6</admin-key>
    <oper-key>6</oper-key>
    <partner-oper-key>6</partner-oper-key>
    <rx-link-count>4</rx-link-count>
    <tx-link-count>4</tx-link-count>
    <individual-agg>0</individual-agg>
    <ready-agg>1</ready-agg>
    <aggr-member>
      <rbridge-id>122</rbridge-id>
      <interface-type>TenGigabitEthernet</interface-type>
      <interface-name>122/5/13</interface-name>
      <actor-port>524410060933</actor-port>
      <sync>1</sync>
    </aggr-member>
  </lacp>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-lag'>
  <lacp>
    <aggregator-id>1</aggregator-id>
    <aggregator-type>standard</aggregator-type>
    <isvlag>false</isvlag>
    <aggregator-mode>static</aggregator-mode>
  </lacp>
  <lacp>
    <aggregator-id>2</aggregator-id>
    <aggregator-type>standard</aggregator-type>
    <isvlag>false</isvlag>
    <aggregator-mode>static</aggregator-mode>
  </lacp>
  <has-more>false</has-more>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-portchannel-info-by-intf	Displays Link Aggregation Control Protocol (LACP) configuration parameters for an Aggregation Port.
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/operational-state/get-portchannel-info-by-intf

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>FortyGigabitEthernet</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>

<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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.



# get-port-profile-for-intf

Retrieves the port-profiles applied on ports and port-channels.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-port-profile-for-intf	Port-profiles applied on ports and port-channels.
URI	Description
<base_URI>/operations/get-port-profile-for-intf	Port-profiles applied on ports and port-channels.

## Parameters

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*name*

Displays the Port-profile name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-port-profile-for-intf

http://host:80/rest/operations/get-port-profile-for-intf

### Request Body

```
<get-port-profile-for-intf></get-port-profile-for-intf>
```

If the entire information cannot be retrieved in a single execution as the output is huge or crossed designed length of chunk. In such cases the remaining information can be retrieved as shown in the request body below.

```
<get-port-profile-for-intf>
  <last-received-interface-info>
    <interface-type>TenGigabitEthernet</interface-type>
    <interface-name>18/0/50</interface-name>
  </last-received-interface-info>
</get-port-profile-for-intf>
```

```
<get-port-profile-for-intf>
  <last-received-interface-info>
    <interface-type>port-channel</interface-type>
    <interface-name>18/0/50</interface-name>
  </last-received-interface-info>
</get-port-profile-for-intf>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-port-profile-ext'>
  <interface>
    <interface-type>TenGigabitEthernet</interface-type>
    <interface-name>2/0/12</interface-name>
    <port-profile>
      <name>default</name>
    </port-profile>
  </interface>
  <interface>
    <interface-type>TenGigabitEthernet</interface-type>
    <interface-name>2/0/13</interface-name>
    <port-profile>
      <name>default</name>
    </port-profile>
  </interface>
  <has-more>false</has-more>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-port-profile-ext'>
  <interface>
    <interface-type>port-channel</interface-type>
    <interface-name>2/0/12</interface-name>
    <port-profile>
      <name>default</name>
    </port-profile>
  </interface>

  <has-more>false</has-more>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-port-profile-status

Retrieves the port-profiles applied on ports and port-channels.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-port-profile-status	Retrieves the port-profiles applied on ports and port-channels.
URI	Description
<base_URI>/operations/get-port-profile-status	Retrieves the port-profiles applied on ports and port-channels.

## Parameters

*name*

Displays the profile name.

*ppid*

Indicates the ID of the port-profile.

*is-active*

Indicates if this port-profile is activated or not.

*mac*

Indicates the MAC addresses associated with this port-profile.

*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/operational-state/get-port-profile-status

http://host:80/rest/operations/get-port-profile-status

### Request Body

```
<get-port-profile-status></get-port-profile-status>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-port-profile-ext'>
  <port-profile>
    <name>Pp1</name>
    <ppid>2</ppid>
    <is-active>true</is-active>
    <has-more>true</has-more>
    <mac-association>
      <mac>00:00:11:11:22:22</mac>
    </mac-association>
    <mac-association>
      <mac>00:00:11:11:22:23</mac>
    </mac-association>
  </port-profile>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-stp-brief-info

Displays spanning tree information.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-stp-brief-info	Displays spanning tree information.

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.

### *bridge-id*

Displays the Bridge ID.

### *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 ls 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/operational-state/get-stp-brief-info

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	History
5.0.0	This API call was introduced.



Release version	Command history
16r.1.00	This API call was introduced.

# get-stp-mst-detail

Retrieves RPC to return MSTP details.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-stp-mst-detail	Retrieves RPC to return MSTP details.
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/operational-state/get-stp-mst-detail

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>TenGigabitEthernet</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>TenGigabitEthernet</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>0000.0000.0000.0000</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>

```

```

<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>0000.0000.0000.0000</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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-system-uptime	Retrieves the time since this managed entity was last re-initialized.

URI	Description
<base_URI>/operations/get-system-uptime	Retrieves the time since this managed entity was last re-initialized.

## Parameters

*rbridge-id*

Displays the RBridge ID.

*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/operational-state/get-system-uptime

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>
    <rbridge-id>1</rbridge-id>
    <days>0</days>
    <hours>5</hours>
    <minutes>53</minutes>
    <seconds>4</seconds>
  </show-system-uptime>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-system'>
  <show-system-uptime>
    <days>0</days>
    <hours>11</hours>
    <minutes>15</minutes>
    <seconds>37</seconds>
  </show-system-uptime>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vcs-details

Retrieves the VCS Fabric configuration information.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vcs-details	Retrieves the VCS Fabric configuration information.

URI	Description
<base_URI>/operational-state/get-vcs-details	Retrieves the VCS Fabric configuration information.

## Parameters

*node-vcs-mode*

Displays the node's VCS mode.

*local-switch-wwn*

Displays the WWN of local switch.

*node-vcs-type*

Displays the VCS types.

*node-vcs-id*

Displays the VCS ID.

*principal-switch-wwn*

Displays the WWN of the principal switch.

*co-ordinator-wwn*

Displays the WWN of the coordinator switch.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-vcs-details

http://host:80/rest/operations/get-vcs-details

### Request Body

```
<get-vcs-details></get-vcs-details>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <vcs-details>
    <node-vcs-mode>true</node-vcs-mode>
    <local-switch-wwn>10:00:00:27:F8:54:4F:98</local-switch-wwn>
    <node-vcs-type>vcs-management-cluster</node-vcs-type>
    <node-vcs-id>1</node-vcs-id>
    <principal-switch-wwn>10:00:00:27:F8:54:4F:98</principal-switch-wwn>
    <co-ordinator-wwn>10:00:00:27:F8:54:4F:98</co-ordinator-wwn>
  </vcs-details>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/get-vlan-brief	Retrieves the operational data for a given VLAN and enumeration of all the interfaces belonging to the VLAN.

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.

*interface-type*

Displays the interface type.

*interface-name*

Displays the interface name.

*tag*

Displays the state of the interface - untagged, tagged, or converged.

*classification-type*

Displays the type of classification.

*classification-value*

Displays the value of the VLAN classification.

*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/operational-state/get-vlan-brief

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 lines of output says has-more=true. In such cases the remaining information can be retrieved using "last-rcvd-interface" as shown in the request body below.

```
<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'>
  <vlan>
    <vlan-id>1</vlan-id>
    <vlan-type>static</vlan-type>
    <vlan-name>default</vlan-name>
    <vlan-state>active</vlan-state>
    <interface>
      <interface-type>port-channel</interface-type>
      <interface-name>6</interface-name>
      <tag>tagged</tag>
    </interface>
  </vlan>
  <vlan>
    <vlan-id>10</vlan-id>
    <vlan-type>static</vlan-type>
    <vlan-name>VLAN0010</vlan-name>
    <vlan-state>invalid</vlan-state>
  </vlan>
  <vlan>
    <vlan-id>53</vlan-id>
    <vlan-type>static</vlan-type>
    <vlan-name>VLAN0053</vlan-name>
    <vlan-state>active</vlan-state>
    <interface>
      <interface-type>FortyGigabitEthernet</interface-type>
      <interface-name>7/0/49</interface-name>
      <tag>untagged</tag>
    </interface>
    <interface>
      <interface-type>TenGigabitEthernet</interface-type>
      <interface-name>7/0/3</interface-name>
      <tag>untagged</tag>
    </interface>
  </vlan>
  <last-vlan-id>53</last-vlan-id>
  <has-more>>false</has-more>
</output>
```

```
<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	History
5.0.0	This API call was introduced.
6.0.0	This API was modified to include the 'has-more' functionality.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vmppolicy-macaddr

Shows vnics/vmknics to port group to port-profile association.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vmppolicy-macaddr	Shows vnics/vmknics to port group to port-profile association.
URI	Description
<base_URI>/operations/get-vmppolicy-macaddr	Shows vnics/vmknics to port group to port-profile association.

## Parameters

*mac*

Displays the MAC address in HH:HH:HH:HH:HH:HH format.

*datacenter*

Displays the name of the datacenter.

*dvpgrp-nn*

Displays the distributed virtual port group.

*port-prof*

Displays the Port-profile.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-vmppolicy-macaddr

http://host:80/rest/operations/get-vmppolicy-macaddr

### Request Body

```
<get-vmppolicy-macaddr>
  <vcenter>VC6</vcenter>
</get-vmppolicy-macaddr>
```

### Response Body

```
<output xmlns="urn:brocade.com:mgmt:brocade-vswitch">
  <vmppolicy-macaddr>
    <mac>00:21:5e:c6:0e:c8</mac>
    <datacenter>datacenter-4381</datacenter>
    <dvpgrp-nn>Management Network</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-4381_Management+Network</port-prof>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>00:50:56:aa:02:ee</mac>
    <datacenter>datacenter-4381</datacenter>
    <name>VM40</name>
    <dvpgrp-nn>pg3</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-4381_pg3</port-prof>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>00:50:56:aa:2d:36</mac>
    <datacenter>datacenter-2</datacenter>
    <name>VM10</name>
    <dvpgrp-nn>VM Network</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-2_VM+Network</port-prof>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>00:50:56:aa:3b:d7</mac>
    <datacenter>datacenter-4381</datacenter>
    <name>VM_Temp</name>
    <dvpgrp-nn>vlan-castor-19</dvpgrp-nn>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>00:50:56:b3:2d:ee</mac>
    <datacenter>datacenter-2</datacenter>
    <name>KVM_Hyperv_103_castor_castor-t</name>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>00:50:56:b3:43:74</mac>
    <datacenter>datacenter-2</datacenter>
    <name>KVM_Hyperv_105_castort_castor</name>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>e4:1f:13:31:cb:88</mac>
    <datacenter>datacenter-2</datacenter>
    <dvpgrp-nn>Management Network</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-2_Management+Network</port-prof>
  </vmppolicy-macaddr>
  <vmppolicy-macaddr>
    <mac>e4:1f:13:31:d3:f4</mac>
    <datacenter>datacenter-2</datacenter>
    <dvpgrp-nn>Management Network</dvpgrp-nn>
    <port-prof>auto_VC6_datacenter-2_Management+Network</port-prof>
```



```
</vmppolicy-macaddr>  
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vnetwork-dvpgs

Shows discovered distributed virtual port groups.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-dvpgs	Shows discovered distributed virtual port groups.
URI	Description
<base_URI>/operations/get-vnetwork-dvpgs	Shows discovered distributed virtual port groups.

## Parameters

*name*

Displays the port group name.

*datacenter*

Displays the datacenter name.

*dvs-nn*

Displays the distributed virtual switch.

*vlan*

Displays the allowed VLANs.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-vnetwork-dvpgs

http://host:80/rest/operations/get-vnetwork-dvpgs

### Request Body

```
<get-vnetwork-dvpgs>
  <vcenter>VC6</vcenter>
</get-vnetwork-dvpgs>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-dvpgs>
    <name>dvPortGroup</name>
    <datacenter>datacenter-2</datacenter>
    <dvs-nn>dvSwitch</dvs-nn>
    <vlan>0,</vlan>
  </vnetwork-dvpgs>
  <vnetwork-dvpgs>
    <name>dvSwitch-DVUplinks-4504</name>
    <datacenter>datacenter-2</datacenter>
    <dvs-nn>dvSwitch</dvs-nn>
    <vlan>0-4094,</vlan>
  </vnetwork-dvpgs>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vnetwork-dvs

Shows discovered Distributed Virtual Switches.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-dvs	Shows discovered Distributed Virtual Switches.
URI	Description
<base_URI>/operations/get-vnetwork-dvs	Shows discovered Distributed Virtual Switches.

## Parameters

*name*

Displays the distributed virtual switch name.

*datacenter*

Displays the host datacenter.

*host*

Displays the host name.

*pnic*

Displays the host NIC.

*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/operational-state/get-vnetwork-dvs

http://host:80/rest/operations/get-vnetwork-dvs

### Request Body

```
<get-vnetwork-dvs>
  <vcenter>VC6</vcenter>
</get-vnetwork-dvs>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-dvs>
    <name>dvSwitch</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnics>vmnic4</pnics>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-dvs>
  <vnetwork-dvs>
    <name>dvSwitch</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnics>vmnic5</pnics>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-dvs>
  <vnetwork-dvs>
    <name>dvSwitch</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnics>vmnic8</pnics>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-dvs>
  <vnetwork-dvs>
    <name>dvSwitch</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnics>vmnic9</pnics>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-dvs>
  <instance-id>0</instance-id>
  <has-more>false</has-more>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vnetwork-hosts

Shows discovered hosts.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-hosts	Shows discovered hosts.
URI	Description
<base_URI>/operations/get-vnetwork-hosts	Shows discovered hosts.

## Parameters

*name*

Displays the host name.

*datacenter*

Displays the host datacenter.

*vmnic*

Displays the host NIC.

*mac*

Displays the vmnic MAC address in HH:HH:HH:HH:HH:HH format.

*vswitch*

Displays the regular or distributed virtual switch.

*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/operational-state/get-vnetwork-hosts

http://host:80/rest/operations/get-vnetwork-hosts

### Request Body

```
<get-vnetwork-hosts>
  <vcenter>VC6</vcenter>
</get-vnetwork-hosts>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vmnic0</vmnic>
    <mac>e4:1f:13:31:d3:f4</mac>
    <vswitch>vSwitch0</vswitch>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vmnic1</vmnic>
    <mac>e4:1f:13:31:d3:f6</mac>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vmnic2</vmnic>
    <mac>00:1b:21:90:67:b4</mac>
    <vswitch>vSwitch1</vswitch>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vmnic4</vmnic>
    <mac>00:1b:21:90:67:b6</mac>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
  <vnetwork-hosts>
    <name>ESX5-0-72.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vusb0</vmnic>
    <mac>e6:1f:13:2b:23:f7</mac>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
  <vnetwork-hosts>
    <name>ESX5-1-74.englab.brocade.com</name>
    <datacenter>datacenter-2</datacenter>
    <vmnic>vmnic0</vmnic>
    <mac>00:21:5e:c6:b6:ec</mac>
    <vswitch>vSwitch0</vswitch>
```



```

    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-hosts>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>ESX5-1-74.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vmnic13</vmnic>
  <mac>00:1b:21:90:70:2d</mac>
  <vswitch>vSwitch1</vswitch>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
</vnetwork-hosts>
<vnetwork-hosts>
  <name>esx5-0-70.englab.brocade.com</name>
  <datacenter>datacenter-2</datacenter>
  <vmnic>vusb0</vmnic>
  <mac>e6:1f:13:2b:1b:8b</mac>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-hosts>
<instance-id>0</instance-id>
<has-more>false</has-more>
</output>

```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vnetwork-portgroups

Shows discovered Port groups.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-portgroups	Shows discovered Port groups.
URI	Description
<base_URI>/operations/get-vnetwork-portgroups	Shows discovered Port groups.

## Parameters

*name*

Displays the host name.

*datacenter*

Displays the host datacenter.

*vlan*

Displays the allowed VLANs.

*host-*nn**

Displays the host name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-vnetwork-portgroups

http://host:80/rest/operations/get-vnetwork-portgroups

### Request Body

```
<get-vnetwork-portgroups>
  <vcenter>VC6</vcenter>
</get-vnetwork-portgroup>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-pgs>
    <name>Management Network</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-0-72.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>PG-1001</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>100</vlan>
    <host-nn>esx5-0-70.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-0-72.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>esx5-0-70.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network</name>
    <datacenter>datacenter-4381</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-1-75.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network</name>
    <datacenter>datacenter-4381</datacenter>
    <vlan>0</vlan>
    <host-nn>ESXi5-0-71.englab.brocade.com</host-nn>
  </vnetwork-pgs>
  <vnetwork-pgs>
    <name>VM Network 2</name>
    <datacenter>datacenter-2</datacenter>
    <vlan>0</vlan>
    <host-nn>ESX5-0-72.englab.brocade.com</host-nn>
  </vnetwork-pgs>
```

```

<vnetwork-pgs>
  <name>VM Network 2</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>0</vlan>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>VM Network 2</name>
  <datacenter>datacenter-2</datacenter>
  <vlan>4095</vlan>
  <host-nn>esx5-0-70.englab.brocade.com</host-nn>
</vnetwork-pgs>
<vnetwork-pgs>
  <name>pg4</name>
  <datacenter>datacenter-4381</datacenter>
  <vlan>100</vlan>
  <host-nn>ESX5-1-75.englab.brocade.com</host-nn>
</vnetwork-pgs>
<instance-id>0</instance-id>
<has-more>>false</has-more>
</output>

```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vnetwork-vm

Shows discovered VMs.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-vm	Shows discovered VMs.
URI	Description
<base_URI>/operations/get-vnetwork-vm	Shows discovered VMs.

## Parameters

*name*

Displays the host name.

*datacenter*

Displays the host datacenter.

*mac*

Displays the MAC address.

*host-nn*

Displays the host name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/get-vnetwork-vms

http://host:80/rest/operations/get-vnetwork-vms

### Request Body

```
<get-vnetwork-vms>
  <vcenter>VC6</vcenter>
</get-vnetwork-vms>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-vms>
    <name>KVM_Hyperv_101_castor_castor</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:5e:25</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_101_castor_castor</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:6b:19</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_102_castor_nexus</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:37:c6</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_102_castor_nexus</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:78:fb</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_103_castor_castor-t</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:69:ca</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_106_castort_nexus</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:76:ce</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_107_castort_castor-t</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:39:f4</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
  <vnetwork-vms>
    <name>KVM_Hyperv_107_castort_castor-t</name>
    <datacenter>datacenter-2</datacenter>
    <mac>00:50:56:b3:68:a3</mac>
    <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
  </vnetwork-vms>
```

```

<vnetwork-vms>
  <name>KVM_Hyperv_108_castort_callisto</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:b3:6e:22</mac>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>Vm_test_clone1</name>
  <datacenter>datacenter-4381</datacenter>
  <mac>00:50:56:aa:43:33</mac>
  <host-nn>ESX5-1-75.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>centos-don-script</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:8d:3c:a6</mac>
  <ip>255.255.255.255</ip>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<vnetwork-vms>
  <name>centos-don-script</name>
  <datacenter>datacenter-2</datacenter>
  <mac>00:50:56:8d:44:0d</mac>
  <ip>255.255.255.255</ip>
  <host-nn>ESX5-1-74.englab.brocade.com</host-nn>
</vnetwork-vms>
<instance-id>0</instance-id>
<has-more>false</has-more>
</output>

```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# get-vnetwork-vswitches

Shows discovered Virtual Switches.

## Resource URIs

URI	Description
<base_URI>/operational-state/get-vnetwork-vswitches	Shows discovered Virtual Switches.
URI	Description
<base_URI>/operations/get-vnetwork-vswitches	Shows discovered Virtual Switches.

## Parameters

*name*

Displays the virtual switch name.

*datacenter*

Displays the host datacenter.

*host*

Displays the host name.

*pnic*

Displays the host NIC.

*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/operational-state/get-vnetwork-vswitches

http://host:80/rest/operations/get-vnetwork-vswitches

### Request Body

```
<get-vnetwork-vswitches>
  <vcenter>VC6</vcenter>
</get-vnetwork-vswitches>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vswitch'>
  <vnetwork-vswitches>
    <name>vSwitch0</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-0-72.englab.brocade.com</host>
    <pnid>vmnic0</pnid>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
  <vnetwork-vswitches>
    <name>vSwitch0</name>
    <datacenter>datacenter-2</datacenter>
    <host>ESX5-1-74.englab.brocade.com</host>
    <pnid>vmnic0</pnid>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
  <vnetwork-vswitches>
    <name>vSwitch2</name>
    <datacenter>datacenter-2</datacenter>
    <host>esx5-0-70.englab.brocade.com</host>
    <pnid>vmnic1</pnid>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
  <vnetwork-vswitches>
    <name>vSwitch3</name>
    <datacenter>datacenter-4381</datacenter>
    <host>ESX5-1-75.englab.brocade.com</host>
    <pnid>vmnic4</pnid>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
  <vnetwork-vswitches>
    <name>vSwitch4</name>
    <datacenter>datacenter-4381</datacenter>
    <host>ESX5-1-75.englab.brocade.com</host>
    <pnid>vmnic5</pnid>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
  <vnetwork-vswitches>
    <name>vSwitch4</name>
    <datacenter>datacenter-4381</datacenter>
    <host>ESX5-1-75.englab.brocade.com</host>
    <pnid>vmnic6</pnid>
    <interface-type>unknown</interface-type>
    <interface-name></interface-name>
  </vnetwork-vswitches>
```

```

<vnetwork-vswitches>
  <name>vSwitch4</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnid>vmnic7</pnid>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
<vnetwork-vswitches>
  <name>vSwitch4</name>
  <datacenter>datacenter-4381</datacenter>
  <host>ESX5-1-75.englab.brocade.com</host>
  <pnid>vmnic8</pnid>
  <interface-type>unknown</interface-type>
  <interface-name></interface-name>
</vnetwork-vswitches>
<instance-id>0</instance-id>
<has-more>>false</has-more>
</output>

```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# maps-get-all-policy

Retrieves the existing MAPS policies.

## Resource URIs

URI	Description
<base_URI>/operational-state/maps-get-all-policy	Retrieves the existing MAPS policies.

URI	Description
<base_URI>/operations/maps-get-all-policy	Retrieves the existing MAPS policies.

## Parameters

*policyname*

Displays the MAPS policy name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/maps-get-all-policy

http://host:80/rest/operations/maps-get-all-policy

### Request Body

```
<maps-get-all-policy></maps-get-all-policy>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-maps-ext'>
  <policy>
    <policyname>dflt_conservative_policy</policyname>
    <policyname>dflt_aggressive_policy</policyname>
    <policyname>dflt_moderate_policy</policyname>
  </policy>
</output>
```

## History

Release version	History
6.0.1	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# mpls-reopt-lsp

Directs the router to consider configuration changes made to an LSP and to optimize the LSP path based on those changes.

## Resource URIs

URI	Description
<base_URI>/operations/mpls-reopt-lsp	Direct the router to consider configuration changes made to an LSP and to optimize the LSP path based on those changes.

## Parameters

*mpls-reoptimize-lsp-name-in*  
Specifies the LSP name.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operations/mpls-reopt-lsp

### Request Body

```
<mpls-reopt-lsp><mpls-reoptimize-lsp-name-in>rest1</mpls-reoptimize-lsp-name-in></mpls-reopt-lsp>
```

### Response Body

None

## History

Release version	Command history
16r.1.00	This API call was introduced.

# reload

Reloads the device.

## Resource URIs

URI	Description
<base_URI>/operational-state/reload	Reloads the switch.

URI	Description
<base_URI>/operations/reload	Reloads the device.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/reload

http://host:80/rest/operations/reload

### Request Body

```
<reload></reload>
```

### Response Body

None

## History

Release version	History
5.0.1	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# set-http-application-url

Updates the HTTP application URL.

## Resource URIs

URI	Description
<base_URI>/operational-state/set-http-application-url	Update HTTP application URL.
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/operational-state/set-http-application-url

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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.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>/operational-state/show-clock	Retrieves current time for the cluster or specified switch.
URI	Description
<base_URI>/operations/show-clock	Retrieves current time for the cluster or specified switch.

## Parameters

*rbridge-id-out*

Displays the RBridge ID.

*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/operational-state/show-clock

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>
    <rbridge-id-out>1</rbridge-id-out>
    <current-time>2014-05-19T16:25:06+00:00</current-time>
    <timezone>Etc/GMT+0</timezone>
  </clock-time>
</output>

<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	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-fabric-trunk-info

Retrieves all ISL trunk information in a fabric.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-fabric-trunk-info	Retrieves all ISL trunk information in a fabric.
URI	Description
<base_URI>/operations/show-fabric-trunk-info	Retrieves all ISL trunk information in a fabric.

## Parameters

### *trunk-list-group*

Provides the trunk group number the interface belongs to. Trunk members of a trunk group have the same group number.

### *trunk-list-src-port*

Displays the source port index of the trunk member.

### *trunk-list-interface-type*

Displays the interface type.

### *trunk-list-src-interface*

Displays the source port interface info.

### *trunk-list-nbr-rbridge-id*

Displays the RBridge id of the neighboring switch that connects to this trunk member port.

### *trunk-list-nbr-port*

Displays neighbor port index of the trunk member.

### *trunk-list-nbr-interface-type*

Displays the interface type.

### *trunk-list-nbr-interface*

Displays the neighbor port interface info.

### *trunk-list-nbr-wwn*

Displays WWN of the neighboring switch that connects to this trunk member port.

### *trunk-list-is-primary*

Indicates whether the port is Trunk master or not.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/show-fabric-trunk-info

http://host:80/rest/operations/show-fabric-trunk-info

### Request Body

```
<show-fabric-trunk-info></show-fabric-trunk-info>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-trunk-list xmlns="urn:brocade.com:mgmt:brocade-fabric-service">
    <trunk-list-groups>
      <trunk-list-group>1</trunk-list-group>
      <trunk-list-member>
        <trunk-list-src-port>174</trunk-list-src-port>
        <trunk-list-interface-type>Te</trunk-list-interface-type>
        <trunk-list-src-interface>6/0/31</trunk-list-src-interface>
        <trunk-list-nbr-port>94</trunk-list-nbr-port>
        <trunk-list-nbr-interface-type>Te</trunk-list-nbr-interface-type>
        <trunk-list-nbr-interface>7/0/31</trunk-list-nbr-interface>
        <trunk-list-nbr-wwn>10:00:00:05:33:E5:E7:FF</trunk-list-nbr-wwn>
        <trunk-list-is-primary>True</trunk-list-is-primary>
      </trunk-list-member>
      <trunk-list-member>
        <trunk-list-src-port>175</trunk-list-src-port>
        <trunk-list-interface-type>Te</trunk-list-interface-type>
        <trunk-list-src-interface>6/0/32</trunk-list-src-interface>
        <trunk-list-nbr-port>95</trunk-list-nbr-port>
        <trunk-list-nbr-interface-type>Te</trunk-list-nbr-interface-type>
        <trunk-list-nbr-interface>7/0/32</trunk-list-nbr-interface>
        <trunk-list-nbr-wwn>10:00:00:05:33:E5:E7:FF</trunk-list-nbr-wwn>
        <trunk-list-is-primary>False</trunk-list-is-primary>
      </trunk-list-member>
    </trunk-list-groups>
  </show-trunk-list>
</output>
```

## History

Release version	History
7.0.0	This API call was introduced.

Release version	Command history
16r.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.

*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

```
<output xmlns='urn:Extreme.com:mgmt:Extreme-firmware-ext'>
  <show-firmware-version>
    <os-name>SLX Operating System Software</os-name>
    <os-version>16r.1.00</os-version>
    <copy-right-info>Copyright (c) 2016 Extreme Communications Systems, Inc.</copy-right-info>
    <build-time>Sun Aug 7 12:29:51 2016
  </build-time>
  <firmware-full-version>16r.1.00slxos_16r.1.00_patch_160807_0300</firmware-full-version>
  <control-processor-vendor></control-processor-vendor>
  <control-processor-chipset></control-processor-chipset>
  <control-processor-memory>7890 MB</control-processor-memory>
  <node-info>
    <slot-no>1</slot-no>
    <node-instance-no>0</node-instance-no>
    <node-type>type-mm</node-type>
    <is-active-cp>true</is-active-cp>
    <firmware-version-info>
      <application-name>NOS</application-name>
      <primary-version>16r.1.00slxos_16r.1.00_patch_160807_0300</primary-version>
      <secondary-version>16r.1.00slxos_16r.1.00_patch_160807_0300</secondary-version>
    </firmware-version-info>
  </node-info>
  <node-info>
    <slot-no>2</slot-no>
    <node-instance-no>0</node-instance-no>
    <node-type>type-mm</node-type>
    <firmware-version-info>
      <application-name>NOS</application-name>
      <primary-version>16r.1.00slxos_16r.1.00_patch_160807_0300</primary-version>
      <secondary-version>16r.1.00slxos_16r.1.00_patch_160807_0300</secondary-version>
    </firmware-version-info>
  </node-info>
  <node-info>
    <slot-no>3</slot-no>
    <node-instance-no>0</node-instance-no>
    <node-type>type-lc</node-type>
    <firmware-version-info>
      <application-name>NOS</application-name>
      <primary-version>16r.1.00slxos_16r.1.00_patch_160807_0300</primary-version>
      <secondary-version>16r.1.00slxos_16r.1.00_patch_160807_0300</secondary-version>
    </firmware-version-info>
  </node-info>
</show-firmware-version>
</output>
```

## History

Release version	Command history
16r.1.00	This API call was introduced.

# show-linkinfo

Retrieves details of all the links connected in the fabric.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-linkinfo	Retrieves details of all the links connected in the fabric.
URI	Description
<base_URI>/operations/show-linkinfo	Retrieves details of all the links connected in the fabric.

## Parameters

*linkinfo-rbridgeid*

Displays the RBridge ID of the node in the fabric.

*linkinfo-domain-reachable*

Indicates whether the RBridge is reachable or not.

*linkinfo-version*

Displays the FSPF version.

*linkinfo-wwn*

Displays the WWN of the switch.

## Usage Guidelines

Only POST operation is supported.



## Examples

### URI

http://host:80/rest/operational-state/show-linkinfo

http://host:80/rest/operations/show-linkinfo

### Request Body

```
<show-linkinfo></show-linkinfo>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-link-info>
    <linkinfo-rbridgeid>1</linkinfo-rbridgeid>
    <linkinfo-domain-reachable>Yes</linkinfo-domain-reachable>
    <linkinfo-version>1</linkinfo-version>
    <linkinfo-wwn>10:00:00:27:F8:54:4F:98</linkinfo-wwn>
  </show-link-info>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-link-info>
    <linkinfo-domain-reachable>Yes</linkinfo-domain-reachable>
    <linkinfo-version>1</linkinfo-version>
    <linkinfo-wwn>10:00:00:27:F8:54:4F:98</linkinfo-wwn>
  </show-link-info>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-portindex-interface-info

Retrieves the details of physical interfaces and FibreChannel over Ethernet (FCoE) ports.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-portindex-interface-info	Retrieves the details of physical interfaces and Fibre Channel over Ethernet (FCoE) ports.
URI	Description
<base_URI>/operations/show-portindex-interface-info	Retrieves the details of physical interfaces and Fibre Channel over Ethernet (FCoE) ports.

## Parameters

*portsgroup-rbridgeid*

Displays the RBridge ID of the switch in the cluster.

*port-index*

Displays the port index of the RBridge.

*port-interface*

Displays the port index interface of the RBridge.

*port-type*

Displays the port type of the RBridge.

*port-index*

Displays the port index.

*port-interface*

Displays the port index interface.

*port-type*

Displays the port type.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/show-portindex-interface-info

http://host:80/rest/operations/show-portindex-interface-info

### Request Body

```
<show-portindex-interface-info></show-portindex-interface-info>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-portindex-interface>
    <portsgroup-rbridgeid>1</portsgroup-rbridgeid>
    <show-portindex>
      <port-index>0</port-index>
      <port-interface>1/1/1</port-interface>
      <port-type>Te</port-type>
    </show-portindex>
  </show-portindex-interface>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-fabric-service'>
  <show-portindex-interface>
    <show-portindex>
      <port-index>0</port-index>
      <port-interface>1/1/1</port-interface>
      <port-type>Te</port-type>
    </show-portindex>
  </show-portindex-interface>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-ntp

Retrieves NTP server information.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-ntp	Retrieves NTP server information.
URI	Description
<base_URI>/operations/show-ntp	Retrieves NTP server information.

## Parameters

*rbridge-id-out*

Displays the RBridge ID.

*LOCL*

Indicates whether the LOCL is true or false.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/show-ntp

http://host:80/rest/operations/show-ntp

### Request Body

```
<show-ntp></show-ntp>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ntp'>
  <node-active-server>
    <rbridge-id-out>3</rbridge-id-out>
    <LOCL>true</LOCL>
  </node-active-server>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-ntp'>
  <node-active-server>
    <LOCL>true</LOCL>
  </node-active-server>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-raslog

Retrieves the entries of RASLOG.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-raslog	Retrieves the entries of RASLOG.

URI	Description
<base_URI>/operations/show-raslog	Retrieves the entries of RASLOG.

## Parameters

*rbridge-id*

Displays the RBridge ID.

*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/operational-state/show-raslog

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 request body below.

```
<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>
    <rbridge-id>1</rbridge-id>
    <number-of-entries>1151</number-of-entries>
    <raslog-entries>
      <index>1</index>
      <message-id>HASM-1004</message-id>
      <date-and-time-info>2014/05/08-16:08:21:48</date-and-time-info>
      <severity>informational</severity>
      <log-type>system</log-type>
      <repeat-count>1</repeat-count>
      <message>Processor reloaded - Reset.</message>
      <message-flag>unknown</message-flag>
      <switch-or-chassis-name>VDX8770-4</switch-or-chassis-name>
    </raslog-entries>
  </show-all-raslog>
</output>
```

```
<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	History
5.0.0	This API call was introduced.

show-raslog

Release version	Command history
16r.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>/operational-state/show-support-save-status	Retrieves the information on the status of a recent support save request.

URI	Description
<base_URI>/operations/show-support-save-status	Retrieves the information on the status of a recent support save request.

## Parameters

*rbridge-id*

Displays the RBridge ID.

*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/operational-state/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

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-support-save-status>
    <rbridge-id>54</rbridge-id>
    <status>unknown</status>
    <message>supportsave is not running.</message>
    <percentage-of-completion>0</percentage-of-completion>
  </show-support-save-status>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-support-save-status>
    <status>unknown</status>
    <message>supportsave is not running.</message>
    <percentage-of-completion>0</percentage-of-completion>
  </show-support-save-status>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-system-info

Retrieves the system information.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-system-info	Retrieves the system information.

URI	Description
<base_URI>/operations/show-system-info	Retrieves the system information.

## Parameters

*rbridge-id-out*

Displays the RBridge ID.

*stack-mac*

Displays the MAC address of the switch.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/show-system-info

http://host:80/rest/operations/show-system-info

### Request Body

```
<show-system-info></show-system-info>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-system-info>
    <rbridge-id>54</rbridge-id>
    <stack-mac>00:05:33:65:2b:4d</stack-mac>
  </show-system-info>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-ras-ext'>
  <show-system-info>
    <stack-mac>00:05:33:65:2b:4d</stack-mac>
  </show-system-info>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-system-monitor

Retrieves the overall status for a selected switch.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-system-monitor	Retrieves the overall status for a selected switch.
URI	Description
<base_URI>/operations/show-system-monitor	Retrieves the overall status for a selected switch.

## Parameters

*rbridge-id-out*

Displays the RBridge ID.

*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/operational-state/show-system-monitor

http://host:80/rest/operations/show-system-monitor

### Request Body

```
<show-system-monitor></show-system-monitor>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-system-monitor-ext'>
  <switch-status>
    <rbridge-id-out>195</rbridge-id-out>
    <switch-name>sw0</switch-name>
    <switch-ip>10.24.81.195</switch-ip>
    <switch-state>state-marginal</switch-state>
    <switch-state-reason>Switch Status is MARGINAL. Contributors:* MM non-redundant: (M2). (MARGINAL).</
switch-state-reason>
    <report-time>2014-06-11T09:40:21+00:00</report-time>
    <component-status>
      <component-name>Power supplies monitor</component-name>
      <component-state>state-healthy</component-state>
    </component-status>
  </switch-status>
</output>

<output xmlns='urn:brocade.com:mgmt:brocade-system-monitor-ext'>
  <switch-status>
    <switch-name>sw0</switch-name>
    <switch-ip>10.24.81.195</switch-ip>
    <switch-state>state-marginal</switch-state>
    <switch-state-reason>Switch Status is MARGINAL. Contributors:* MM non-redundant: (M2). (MARGINAL).</
switch-state-reason>
    <report-time>2014-06-11T09:40:21+00:00</report-time>
    <component-status>
      <component-name>Power supplies monitor</component-name>
      <component-state>state-healthy</component-state>
    </component-status>
  </switch-status>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-vcs

Retrieves the VCS information.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-vcs	Retrieves the VCS information.

URI	Description
<base_URI>/operations/show-vcs	Retrieves the VCS information.

## Parameters

*vcs-cluster-type-info*

Displays the VCS type.

*vcs-guid*

Displays the VCS cluster GUID.

*virtual-ip-address*

Displays the cluster virtual IP address.

*principal-switch-wwn*

Displays the VCS Cluster principal switch WWN.

*co-ordinator-wwn*

Displays the VCS cluster coordinator node WWN.

*total-nodes-in-cluster*

Displays the total number of nodes in cluster.

*nodes-disconnected-from-cluster*

Displays the number of nodes disconnected from cluster.

*cluster-generic-status*

Displays the cluster generic status.

*cluster-specific-status*

Displays the cluster specific status.

*node-num*

Displays the node number.

*node-serial-num*

Displays the serial number.

*node-condition*

Displays the node condition.

*node-status*

Displays the node status.

*node-vcs-mode*

Displays the node's VCS mode.

*node-vcs-id*

Displays the node VCS ID.

*node-rbridge-id*

Displays the node RBridge ID.

*node-is-principal*

Indicates if the node is management cluster principal.

*node-co-ordinator*

Indicates if the node is management cluster coordinator.

*node-switch-mac*

Displays the node switch MAC address.

*node-switch-wwn*

Displays the node switch WWN.

*switch-fcf-mac*

Displays the node FCF MAC address.

*node-internal-ip-address*

Displays the node internal IP address.

*node-public-ip-address*

Displays the node public IP address.

*node-public-ipv6-address*

Displays the node public IPv6 address.

*node-swbd-number*

Displays the node SWBD number.

*firmware-version*

Displays the node firmware version.

*node-switchname*

Displays the node switch name.

*node-fabric-state*

Displays the Fabric node state.

*vcs-cluster-type-info*

Displays the VCS type.

*node-num*

Displays the node number.

*node-serial-num*

Displays the serial number.

*node-condition*

Displays the node condition.

*node-status*

Displays the node status.



*node-vcs-mode*

Displays the node's VCS mode.

*node-vcs-id*

Displays the node VCS ID.

*node-is-principal*

Indicates if the node is management cluster principal.

*node-co-ordinator*

Indicates if the node is management cluster coordinator.

*node-switch-mac*

Displays the node switch MAC address.

*node-switch-wwn*

Displays the node switch WWN.

*switch-fcf-mac*

Displays the node FCF MAC address.

*node-internal-ip-address*

Displays the node internal IP address.

*node-public-ip-address*

Displays the node public IP address.

*node-public-ipv6-address*

Displays the node public IPv6 address.

*node-swbd-number*

Displays the node SWBD number.

*firmware-version*

Displays the node firmware version.

*node-switchname*

Displays the node switch name.

*node-fabric-state*

Displays the Fabric node state.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/show-vcs

http://host:80/rest/operational-state/show-vcs

### Request Body

```
<show-vcs></show-vcs>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <vcs-cluster-type-info>vcs-management-cluster</vcs-cluster-type-info>
  <vcs-guid>00000000000000000000000000000000</vcs-guid>
  <virtual-ip-address>NULL</virtual-ip-address>
  <principal-switch-wwn>10:00:00:27:F8:54:4F:98</principal-switch-wwn>
  <co-ordinator-wwn>10:00:00:27:F8:54:4F:98</co-ordinator-wwn>
  <total-nodes-in-cluster>1</total-nodes-in-cluster>
  <nodes-disconnected-from-cluster>0</nodes-disconnected-from-cluster>
  <cluster-generic-status>Good</cluster-generic-status>
  <cluster-specific-status>All Nodes Present in the Cluster</cluster-specific-status>
  <vcs-nodes>
    <vcs-node-info>
      <node-num>1</node-num>
      <node-serial-num>CDU2507J00D</node-serial-num>
      <node-condition>Good</node-condition>
      <node-status>Co-ordinator</node-status>
      <node-vcs-mode>Enabled</node-vcs-mode>
      <node-vcs-id>1</node-vcs-id>
      <node-rbridge-id>1</node-rbridge-id>
      <node-is-principal>true</node-is-principal>
      <co-ordinator>true</co-ordinator>
      <node-switch-mac>00:27:f8:54:50:19</node-switch-mac>
      <node-switch-wwn>10:00:00:27:F8:54:4F:98</node-switch-wwn>
      <switch-fcf-mac>00:27:f8:54:4f:98</switch-fcf-mac>
      <node-internal-ip-address>127.1.0.1</node-internal-ip-address>
      <node-public-ip-addresses>
        <node-public-ip-address>10.24.81.195</node-public-ip-address>
      </node-public-ip-addresses>
      <node-public-ipv6-addresses>
      </node-public-ipv6-addresses>
      <node-swbd-number>1000</node-swbd-number>
      <firmware-version>v5.0.0nos5.0.0_pit_a_140518_1800</firmware-version>
      <node-switchname>sw0</node-switchname>
      <node-state>Online</node-state>
      <node-fabric-state>Online</node-fabric-state>
    </vcs-node-info>
  </vcs-nodes>
</output>
```

```
<output xmlns='urn:brocade.com:mgmt:brocade-vcs'>
  <vcs-cluster-type-info>vcs-stand-alone</vcs-cluster-type-info>
  <vcs-nodes>
    <vcs-node-info>
      <node-num>1</node-num>
      <node-serial-num>DCN0325K005</node-serial-num>
      <node-condition>Good</node-condition>
      <node-status>StandAlone</node-status>
      <node-vcs-mode>Disabled</node-vcs-mode>
      <node-vcs-id>0</node-vcs-id>
      <node-is-principal>false</node-is-principal>
      <co-ordinator>false</co-ordinator>
    </vcs-node-info>
  </vcs-nodes>
</output>
```

```

<node-switch-mac>60:9c:9f:0d:3a:89</node-switch-mac>
<node-switch-wnn>27:00:00:10:D3:FF:E0:F8</node-switch-wnn>
<switch-fcf-mac>00:00:00:00:00:00</switch-fcf-mac>
<node-internal-ip-address>127.1.0.1</node-internal-ip-address>
<node-public-ip-addresses>
  <node-public-ip-address>0.0.0.0</node-public-ip-address>
</node-public-ip-addresses>
<node-public-ipv6-addresses>
</node-public-ipv6-addresses>
<node-swbd-number>2000</node-swbd-number>
<firmware-version>v16r.1.01slxos_16r.1.x_maint_160817_1900</firmware-version>
<node-switchname>SLX</node-switchname>
<node-switchctype>BR-SLX9850-4</node-switchctype>
<node-switch-subtype>2</node-switch-subtype>
<node-switch-description>Not supported in this platform</node-switch-description>
<manufacturer-name>Not supported in this platform</manufacturer-name>
<node-state>Online</node-state>
<node-fabric-state></node-fabric-state>
</vcs-node-info>
</vcs-nodes>
</output>

```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.

# show-zoning-enabled-configuration

Retrieves zoning-enabled configuration information.

## Resource URIs

URI	Description
<base_URI>/operational-state/show-zoning-enabled-configuration	Retrieves zoning-enabled configuration information.

URI	Description
<base_URI>/operations/show-zoning-enabled-configuration	Retrieves zoning-enabled configuration information.

## Parameters

*cfg-name*

Displays the name of the zone configuration.

*zone-name*

Displays the name of a zone to be added to the configuration.

*entry-name*

Displays the WWN of the device.

## Usage Guidelines

Only POST operation is supported.

## Examples

### URI

http://host:80/rest/operational-state/show-zoning-enabled-configuration

http://host:80/rest/operations/show-zoning-enabled-configuration

### Request Body

```
<show-zoning-enabled-configuration></show-zoning-enabled-configuration>
```

### Response Body

```
<output xmlns='urn:brocade.com:mgmt:brocade-zone'>
  <enabled-configuration>
    <cfg-name></cfg-name>
    <has-more>false</has-more>
  </enabled-configuration>
</output>
```

## History

Release version	History
5.0.0	This API call was introduced.

Release version	Command history
16r.1.00	This API call was introduced.